VINGTOR Billing System Version 2.0





CONFIGURATION GUIDE A100K10590

About this Document

Document Scope

This document provides a system overview and configuration instructions for the VINGTOR Billing System application software version 2.0.

The VINGTOR Billing Version 2.0 is only supported on AMC-IP board version 11 hardware.

Revision Information

Rev.	Date	Author	Status
2.0	1.10.2010	HKL	Released

Related Documentation

For further information, refer to the following documentation:

Doc. no.	Documentation
A100K10001	ACM Family System Overview and Installation
A100K10338	AlphaCom E System Management and Operation
A100K10390	SIP GSM Gateway MV-370
A100K10333	SIP Gateway AudioCodes MP-114/118
	ACM-M-A-V2 ACM Telephone System

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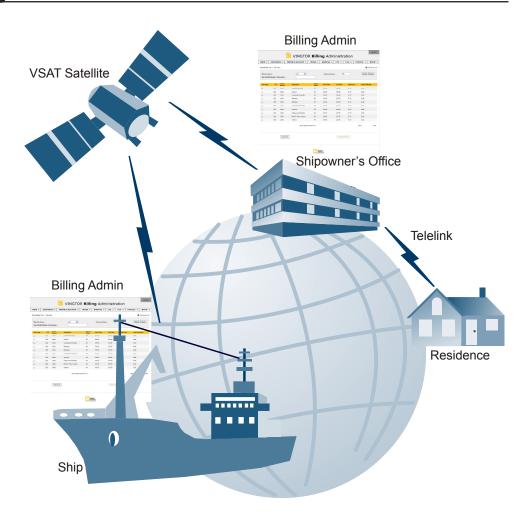
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1 Billing System Overview



1.1 Features

The main features of the VINGTOR Billing system are:

- Manage and control communication fees and expenses
- Generate revenues on VINGTOR telephone calls
- Easy to set up and install
- Web-based user interface for generating invoices and reports, and user administration

1.2 Description

The VINGTOR Billing application makes it possible to manage and administer the communication fees and expenses for your VINGTOR ACM system. The application provides access authorization to external communication. The calling users will be identified based on PIN or subscriber number. Each user will have a set of authorization criteria such as credit line, and trunk type, which determines if he/she will be granted access to external communication.

The VINGTOR Billing application is a full billing system which allows you to generate revenues from your VINGTOR system and to administer a set of billing scenarios. Fees can, for instance, be calculated based on carrier type, duration, called number, and time of day. Billing of users can be done either by pre-paid or post-paid payment methods.

The application has a user-friendly web interface, making the job of the billing administrator much easier. The administrator can use a standard Internet web browser to log into the system. From the web browser, the administrator is able to:

- Print billing invoices
- Print and view usage reports
- Change billing setup

Five different product versions of the VINGTOR Billing System are available with capacity from 2 to 32 external trunk lines, all catering to a maximum of 400 users.

Part Number	No. of Trunks
1009647902	2 trunks
1009647904	4 trunks
1009647908	8 trunks
1009647916	16 trunks
1009647932	32 trunks

2.1 Connecting to AlphaCom

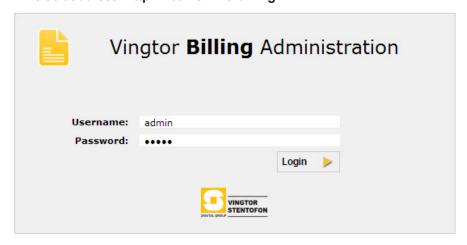
Connect the PC Ethernet port to the LAN port (Eth0) on the AlphaCom exchange using an Ethernet cable, or connect both the PC and the AlphaCom to an Ethernet switch.

2.2 Logging in to the Billing System

Use a web browser to connect to the Billing web server.

Enter the IP address of the exchange in the address field of the web browser.

Default address: http://169.254.1.5/billing



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On the login page, enter the user name (default: **admin**) and password (default: **admin**).

The system comes predefined with admin as the default account. The password may be changed under SETUP > Administration.

The Billing system status information page will now be displayed. The page also provides direct links to all other pages.



At the top of the page is a menu bar which can be used to browse through the different pages.

2.3 System Parameters

The **SYSTEM CAPACITIES** box shows the fixed capacities and used resources in the system.

SYSTEM CAPACITIES

- Active/Blocked Users
 Total number of programmed users in the Billing program.
- Max Active/Blocked Users
 Maximum number of users that can be activated in the Billing program.
- Billing Licenses
 Shows how many trunk lines that are opened by license key in the AMC program.
- Open Trunks
 Trunk lines available for outgoing calls.
- Blocked Trunks
 Trunk lines not available for outgoing calls.
- Open Extensions
 Extensions where trunk calls can be made without a PIN code (e.g. bridge or captain's extension units)
- PIN Code Extensions
 Extensions where a PIN code is needed to make a trunk call.
- Locked Extensions
 Extensions that are blocked from making trunk calls.
- Assigned Extensions
 Extensions that have been assigned to Users or Service Accounts.
- System Time
 Date/time settings in the AlphaCom exchange. Can not be set or changed via the Billing Administration program.

The **SYSTEM SHORTCUTS** box provides direct links and shortcuts to all submenu options available in the menu bar.

3 Configuring the Billing System

For the Billing system to become operational, it has to be configured. The following sections will describe the configuration procedures for the Billing system. For all other programming and setup of the AlphaCom server such as call numbers, trunk access numbers, incoming call handling, Class-Of-Service, SIP Gateways etc, see the corresponding documentation.

3.1 Menu Bar

There are two access rights levels when logging in to the Billing system. Logging in with **Administrator** rights gives access to all menus in the menu bar. Setup of administration rights is done under **SETUP** > **Administration** from the menu bar.





USER

User Setup

Here **Users** may be created and set up in the Billing system. The **User** is not dependent on any specific extension number in the exchange. User calls can be made from any telephone in the exchange.

User Groups

Here **User Groups** may be created and set up in the Billing system. Users may be assigned to a User Group. Settings can be applied to all members in a group through the User Group pages.

A User Group is normally assigned to a Login Account. Login Accounts are available through the **Setup > Administration** menu. When logging in with this account, only the members of the assigned User Group and members in "Open" Groups are available. Login Accounts with the password level "Administrator" always have access to all User Groups.

"Open" Groups are not assigned to a specific Login Account, but are available to all.



EXTENSION

Extension Setup

Setup and overview of all the extensions in the Billing system. The extension numbers should match the extension numbers programmed in the exchange.

Wake Up

Wake Up calls for specific times may be set up for each extension in the system.

SERVICE ACCOUNT



Service Account Setup

Setup and overview of all the service accounts in the Billing system. New accounts may be created.

TRUNK

Trunk Setup



Setup and overview of the external Trunk line connections to Satellite communication, GSM and Shore lines. A default charging fee can be set up for the individual Trunk. This fee calculation is used when no specific Fee Group is specified for the Trunk.

Trunk Access Groups

Setup and overview of the Trunk Access Groups. Each group provides access to one or more trunks. One trunk may be a member of several Trunk Access Groups.

Trunk Type Setup

A trunk can either be an analog or digital trunk in the billing system. There are 8 default trunk types that are already predefined in the system



BARRING

Barring Setup

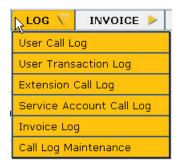
The Billing system can be programmed to restrict certain external telephone numbers from being dialled on the external line. The numbers are specified in the Barring setup.



FEE

Fee Setup

Different external line types have different costs depending of the time during the day, day of the week and the dialled external number. All the different cost aspects regarding an outgoing call are specified in the Fee Setup.



LOG

User Call Log

The call logging feature holds all data concerning an external call. All data is stored and can be printed out at any time.

User Transaction Log

Transaction log will log all the transactions made for Users accounts, i.e. all added amounts to the user account will be registered.

Extension Call Log

This logs all the transactions made on the extensions.

Service Account Call Log

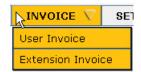
This logs all the transactions made on the Service Account.

Invoice Log

This saves the invoice timestamp for all the calls from the User and Extension Call Logs that are invoiced.

Call Log Maintenance

This shows all calls made from Extensions and Users in a common log.



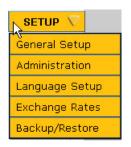
INVOICE

User Invoice

Printout function for User invoices. Specific dates can be selected in the printout page.

Extension Invoice

Printout function for Extension invoices.



SETUP

General Setup

Basic setup functions for the Billing System such as owner account information, default currency to be used, etc.

Administration

Administration of user accounts such as login rights, passwords, etc.

Language Setup

Language selection for English, German, or French.

Exchange Rates

Currency rates to be used.

Backup/Restore

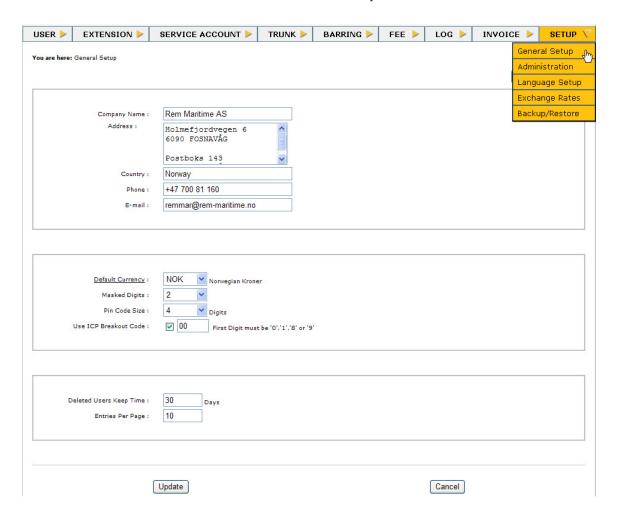
Backup/Restore function from a list of backup files.

3.2 General Setup

The General Setup main page is used to set up the basic information for the Billing system, such as the company name and address that will be shown on the invoices, the default currency used and the number of digits that should be hidden on the invoices for integrity reasons. General Setup also maintains the PIN code size used for Extension and User dialling as well as the number of days a non-active User, e.g. *deleted*, will be kept in the system before total removal.

To open the setup page:

• Select SETUP > General Setup



3.2.1 Editing settings

Default Currency

This is the currency that will be shown on the invoice. Select the available currency from the drop-down list. See section 4.2.5 'Exchange Rates' for currency setup.

F If the currency is changed, no conversion of registered amounts will take place.

All calls must be invoiced before **Default Currency** can be changed.

Masked Digits

Select from the drop-down list the number of digits to be masked from a dialled telephone number shown on invoices. The last digits in the dialed number will be shown as asterisks (*).

PIN Code Size

The number of digits to be used in personal PIN Codes for Extensions and Users are selected here.

Do not change the PIN Code size and codes for Extensions and Users if they have already been specified or programmed. Doing so will block new calls until the codes are corrected.

Use ICP Breakout Code

ICP Code (International Call Prefix) to be used. Set the checkbox as 'Checked' and edit the call prefix. Please note that prefix must start with '0', '1', '8' or '9' and will be valid for all Trunks.

Deleted Users Keep Time

Insert the number of days the User will be shown in User list after marked as 'Deleted'. When this time has expired the User will be removed from User listing page and removed from all call logs.

Entries Per Page

The number of entry lines per page can be globally changed by adjusting this parameter.

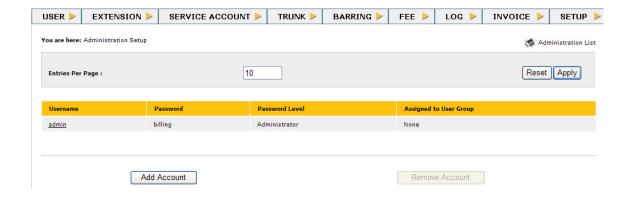
Click the **Update** button to save the settings and return to the previous page.

If no changes are made, click the **Cancel** button. The start page will be opened automatically.

Use print link to get a hardcopy of General Setup settings.

3.3 Administration Setup

By selecting **SETUP > Administration** in the menu bar the administration overview page will be opened.



The page will show the default username, password, login privileges and the group assigned.

It is recommended to change the default password for security reasons.

The default login username **admin** can NOT be changed. Another administrator login with a different username can be made in addition to the **admin** account.

Add Account

Remove Account

- To add a new system user click the Add Account button. This will open the Administration Setup page where a new user can be set up.
- To change a system user, click the username. This will open the **Administration Setup** page.
- To remove an administrator or user from the system, highlight the account and click the Remove Account button.
- To change entry per page temporary adjusted in the 'Entries Per Page' value and click the 'Apply' button

Note that this change is temporarily valid while this wizard is open.

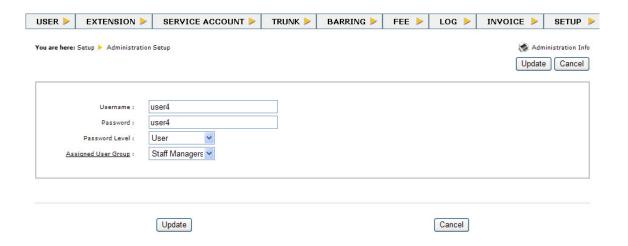
The parameter can be globally changed in wizard Setup/General Setup

Use the print link to get a hardcopy of all administration settings.

Keep the printout of the login names and code in a safe place.

3.3.1 Adding or Changing Administration Settings

Click Add Account to open the setup page as below.



- 1. Enter a new User Name and Password.
- 2. Select the access rights to the Billing system from the **Password Level** drop-down list:
 - Administrator has full access to the system.
 - User has limited access to the system.
- Select the user group from the **Assigned User Group** drop-down list.
 - Accounts with Password Level: User can have User Groups assigned to them. Accounts with Password Level: Administrator always have access to all User Groups. Open Groups are not assigned to a particular account and are available to all accounts.

4. Click **Update** to save the new account and return to the previous page.

Click Cancel to return to previous page without saving the changes made.

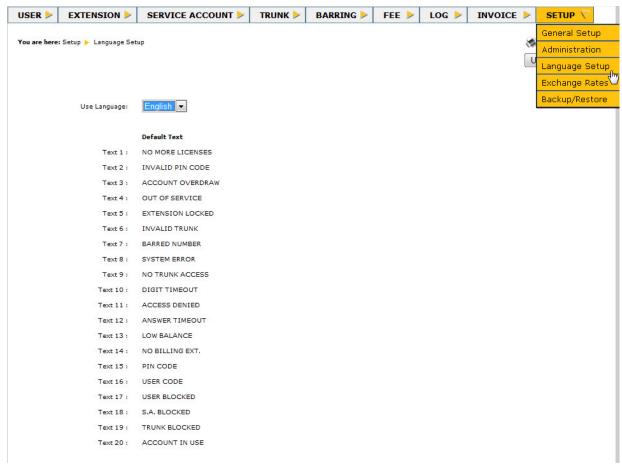
Use the print link to get a hardcopy of the settings.

It is recommended to keep the printout in a safe place.

3.4 Language Setup

The Billing system provides a number of warning and error messages that can be viewed on the telephone display. The language selection for the messages is made in this menu. Available languages are English, German, and French.

Select **SETUP > Language Setup** in the menu bar.



Text info and meaning:

NO MORE LICENSES All the billing trunks are in use
INVALID PIN CODE Wrong PIN Code entered.

ACCOUNT OVERDRAWN Sum of User's Balance and Credit value is

zero or negative.

OUT OF SERVICE The Billing database is not available

EXTENSION LOCKED Extension is blocked

INVALID TRUNK Trunk is not configured in the Billing system.

BARRED NUMBER Dialled number is blocked.

SYSTEM ERROR Fatal error. No communication with main

program.

NO TRUNK ACCESS Not allowed to make calls on the dialed trunk.

DIGIT TIMEOUT Timeout when entering PIN Code.

ACCESS DENIED User is blocked by Billing Administrator or two

or more calls are being dialled on the same

user account at the same time.

ANSWER TIMEOUT No answer (off-hook) received from called

party.

LOW BALANCE Warning sent approximately 10 seconds

(time is configurable) before Balance and

Credit values become negative.

NO BILLING EXT. Extension not configured in Billing system.

PIN CODE Enter PIN code

USER CODE Enter User PIN code
USER BLOCKED The User is blocked

S.A. BLOCKED The Service Account is blocked

TRUNK BLOCKED The Trunk is blocked

ACCOUNT IN USE The User is already involved in a call

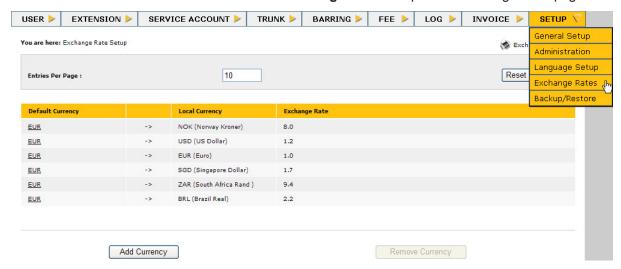
To select the language:

 Select English, German or French in the Use Language drop-down list

- 2. Click **Update** to save the settings.
- 3. If no changes are made, click **Cancel** and the home page will be displayed.

3.5 Exchange Rates

Select **SETUP** > **Exchange Rates** to open the exchange rates page.



Default Currency

This is the currency defined in the **General Setup** page. All currency rates are calculated versus this currency. The first line in the currency list will always show the default currency with **Exchange Rate = 1.0**. This line is automatically generated and can not be deleted.

Local Currency

This is the local currency which is defined with its exchange rate versus the default currency.

Exchange Rate

This is the exchange rate of the local currency versus the default currency.

Add Currency

Remove Currency

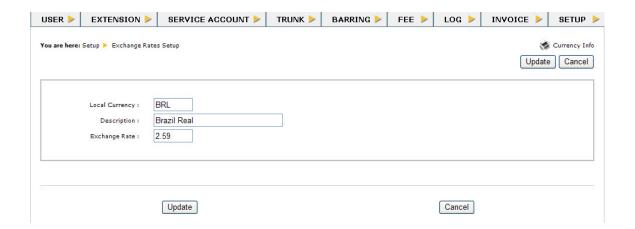
- To add new currencies, click the **Add Currency** button. This will open a new **Exchange Rates Setup** page.
- To change a currency setup, click the relevant currency under the Default Currency column. This will open the Exchange Rates Setup page for the currency. Make the necessary changes and click Update to save the settings.
- To delete a currency from the system, click the currency entry to highlight it, and then click the Remove Currency button.
- To change the number of entries per page, enter the desired value in the Entries Per Page field and then click the Apply button
 - Note that this change is temporarily valid for the page.
 - The parameter can be globally changed in **Setup > General Setup**

Use the print link to get a hardcopy of the settings.

It is recommended to keep the printout in a safe place.

3.5.1 Adding Currencies or Changing Currency Settings

Click **Add Currency** to enter new currency settings or click the relevant currency entry to change its settings.



Adding or changing exchange currency setup

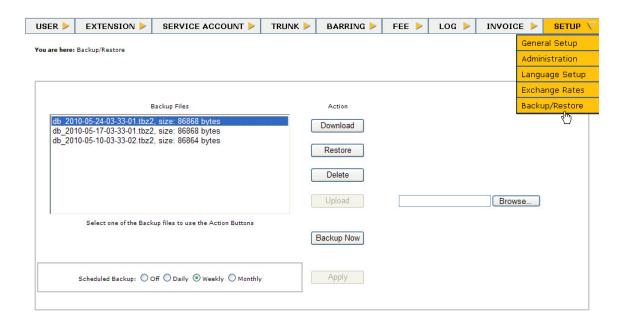
- 1. In the **Local Currency** field, enter the three-letter currency code for the local currency.
- 2. In the **Description** field, enter the type of currency.
- 3. In the **Exchange Rate** field, enter the exchange rate of the local currency versus the default currency.
- 4. Click the **Update** button to save the settings and return to the previous page.

Use the print link to get a hardcopy of the settings.

It is recommended to keep the printout in a safe place.

3.6 Backup/Restore

Select **SETUP** > **Backup/Restore** to open the page.



On the **Backup/Restore** page, is a list of the latest three backup files present on the AMC Flash. The name of each backup file contains the date and time when the backup was created in the following convention: db_YYYY-MM-DD-HH-MM-SS.tbz2. It is important that uploaded files follow this naming convention, as it is used by the backup schedule procedure to determine which file(s) to delete.

Scheduled Backup

The scheduled backup can be set to 4 possible modes: Off, Daily, Weekly, or Monthly.

Daily backup will be run each day at 03.33 (AM). Weekly backup will be run each Monday at 03.33 (AM). Monthly backup will be run on the 1st of each month at 03.33 (AM).

When setting a scheduled backup, select one of the modes and click **Apply**.

The scheduled backup function will save up to 3 backup files on the AMC Flash. If there are 3 backup files already present, the oldest one will be deleted and a new backup file will be created. Each of the saved backup files can be downloaded to the administrator's PC, restored or deleted.

Backup Now

The **Backup Now** function will create a backup file that will be immediately downloaded to the administrator's PC, and will not be saved on the AMC Flash.

Upload

Uploading a backup file to the AMC flash will save the backup file in the same location as the other backup files, and can be restored from there. Uploading backup files may lead to a situation where there are more than 3 backup files stored on the AMC flash. In this case, the scheduled backup procedure will, when run, analyze the file name of each backup file and delete the oldest one and keep the 2 newest files and create a new one. This may lead to a situation where if the uploaded backup

file is the oldest, the file disappears from the list in the Backup/Restore page.

Download

To download one of the backup files from the AMC Flash to the local PC, select one of the files in the backup file list and click **Download**. The file can then be saved in a chosen the directory on the PC.

Restore

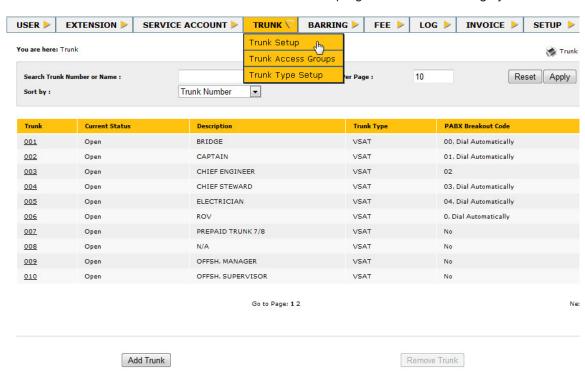
To restore the database from a backup file, select the file to restore from and click **Restore**. When the restore process has been completed, the Billing application will automatically run the Logout procedure, and the Login page will be displayed.

Delete

Backup files on the AMC Flash may be deleted by selecting a file from the backup file list and clicking **Delete**.

3.7 Trunk Setup

Select **TRUNK** > **Trunk Setup** in the menu bar to display a listing of all the used trunk line connections programmed in the Billing system.



Trunk

The number to dial for access to the trunk line.

Current Status

- Open: The trunk is ready for use.
- Blocked: The trunk is blocked and can not be used.

Description

A short description of the trunk type.

Trunk Type

The trunk type such as VSAT, GSM etc.

PABX Breakout Code

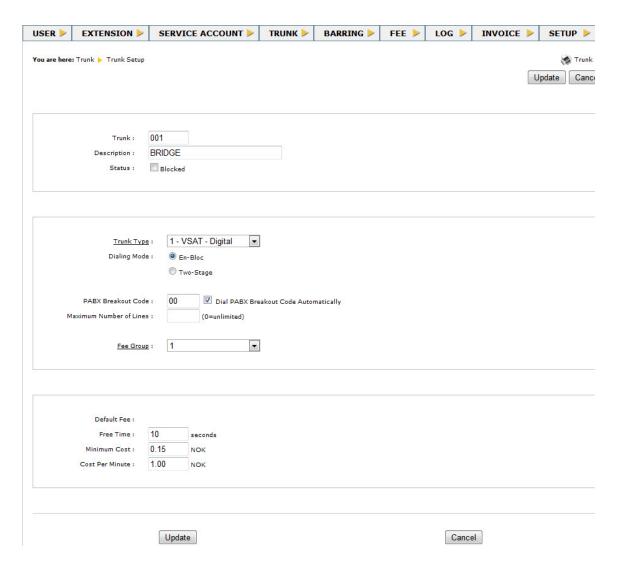
The PABX Breakout Code is used when the trunk line is to be connected via the local company PABX for access to external lines. This column indicates whether the trunk is using a breakout code. The activation and setup of the code is made in the Trunk Setup page. The status is either *No* or the code itself.

- To add a new trunk, click the Add Trunk button.
 - This will open the **Trunk Setup** page.
- To change trunk settings, click the relevant trunk number under the Trunk column.
 - This will open the Trunk Setup page.
- To delete a trunk from the list, highlight the trunk and click the Remove Trunk button.
- To change the number of entries per page, enter the desired value in the Entries Per Page field and then click the Apply button
 - Note that this change is temporarily valid for the page.
 - The parameter can be globally changed in **Setup > General Setup**

Use the print link to get a hardcopy of all trunks in the list.

3.7.1 Adding Trunks or Changing Trunk Settings

Click **Add Trunk** to enter new trunk settings or click the relevant trunk entry to change its settings.





Add Trunk

Remove Trunk

Trunk

Enter the call number to be dialed for access to the Trunk. The number should be the same as the one in the exchange number plan for the trunk line connection.

Description

Enter a short description of the type of trunk.

Status

Make the choice for the Trunk by clicking the checkbox:

- Blocked: Trunk is not available for outgoing calls

Trunk Type

Select a trunk type from the drop-down list. There are 8 predefined trunk types, both analog and digital, that come with the system. If a digital trunk is selected, the dialing mode has to be chosen.

- Dialing Mode: Select either En-Bloc or Two-Stage

PABX Breakout Code

If this code should be used, enter the desired prefix.

Dial PABX Breakout Code Automatically

Click this checkbox if you want the breakout code to be dialed automatically.

Maximum Number of Lines

Enter a the maximum number of lines for the trunk. Entering 0 will provide an unlimited number of lines.

Fee Group

Select a fee group from the drop-down list. The default value is None.

Default Fee

Enter values for the following:

- Free Time in seconds
- Minimum Cost
- Cost Per Minute

When all the options for the trunk have been specified, click the **Update** button to save the settings.

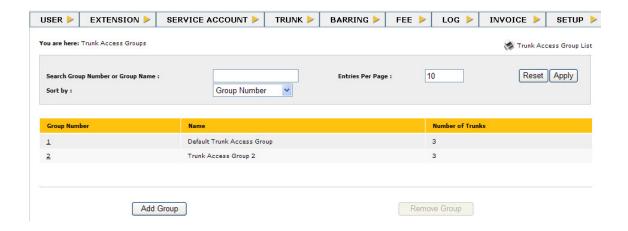
If no changes are made, click the Cancel button.

Use the print link to get a hardcopy of the actual settings for the specific trunk.

3.8 Trunk Access Groups

The Trunk Access Group provides access to one or more trunks. One trunk may be a member of several Trunk Access Groups. Trunk Access Groups are available for Users (also through User Group Membership), Extensions and Service Accounts. There are also options to select **None** (which effectively blocks the User/Extension/Service Account) or **All** (which gives access to all trunks).

Select **TRUNK** > **Trunk Access Groups** in the menu bar to display a listing of all the used Trunk Access Groups programmed in the Billing system.



Group Number

The group number of the Trunk Access Group.

Name

The name of the Trunk Access Group.

Number of Trunks

The number of trunks in the Trunk Access Group.

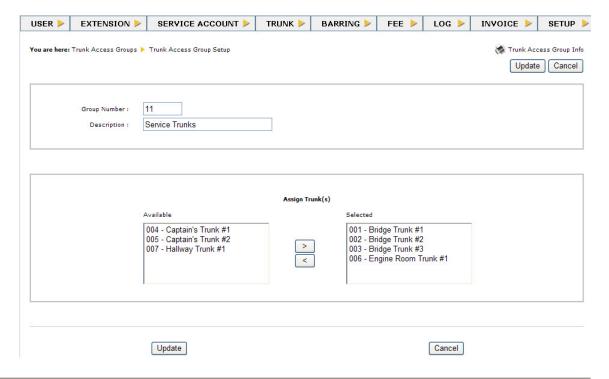
Add Group

Remove Group

- To add a new Group to the Billing system, click the Add Group button and the Trunk Access Groups Setup page will be displayed.
- To delete an existing Trunk Access Group, highlight the group and click the Remove Group button.

3.8.1 Adding Groups or Changing Group Settings

Click **Add Group** to enter new group settings or click the relevant group number to change its settings.



Group Number

Enter a number for the Group.

Description

Enter a short description of the Group.

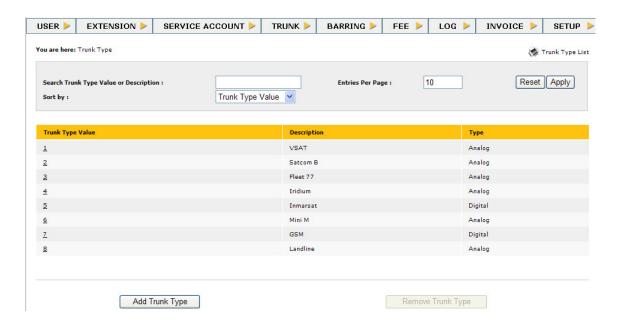
Highlight the available trunks and click the right-arrow button to assign trunks to the **Selected Trunk(s)** box.

When all the options for the trunk have been specified, click the **Update** button to store the settings.

3.9 Trunk Type Setup

A trunk can either be an analog or digital trunk in the billing system. There are 8 default trunk types that are already specified in the system

Select **TRUNK** > **Trunk Type Setup** in the menu bar to display a listing of all the trunk types specified in the Billing system.



Trunk Type Value

The number of the trunk type.

Description

A short description of the trunk type.

Type

The trunk type is either Analog or Digital.

- To delete a manually added trunk type from the list, highlight the
 - It is not possible to delete the 8 default trunk types in the system.

Add Trunk Type

• To add a r

Remove Trunk Type

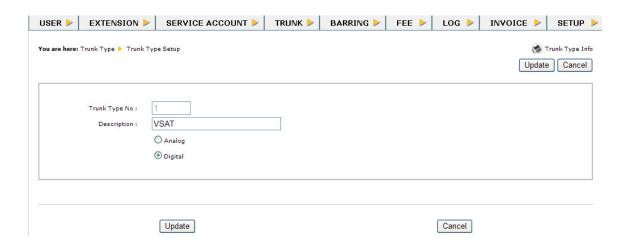
- To add a new trunk type, click the Add Trunk Type button.
 - This will open the Trunk Type Setup page.
- To change trunk type settings, click the trunk type value.

trunk type and click the **Remove Trunk Type** button.

- This will open the Trunk Type Setup page.

3.9.1 Adding Trunk Types or Changing Trunk Type Settings

Click **Add Trunk Type** to enter new trunk type settings or click the relevant trunk type value to change its settings.



Trunk Type Value

Enter a unique number for the trunk type.

Description

Enter a short description of the trunk type.

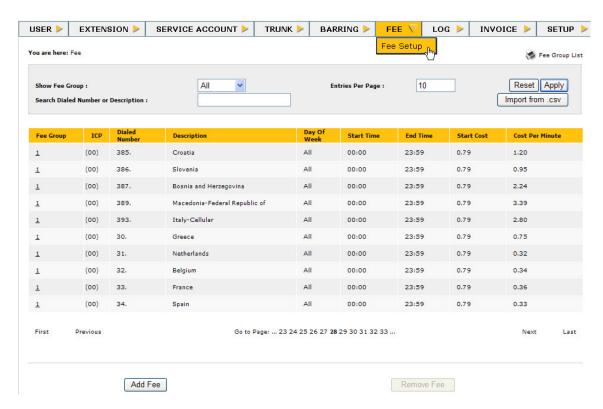
Type

Click either the Analog or Digital radio-button to select the trunk type.

When all the options for the Trunk Type setup have been specified, click the **Update** button to save the settings.

3.10 Fee Setup

Select **FEE** > **Fee Setup** in the menu bar. The **Fee** main page displays all the settings for the different fee groups. The table is used for differential charging costs depending on trunk type, day of week, time of day and the dialed external number. There is no limit to the number of groups nor to the number of entries in each group.



Fee Group

This is the group number for the actual fee. This group number has to match the group number set for the trunk in the Trunk Setup page.

ICP

This column shows the International Call Prefix used to dial out, usually 00.

Dialed Number

The dialed number that the charges are valid for. This can be a complete number or a part of a number, e.g. country and area codes including wildcards.

Description

Specification of the dialed number.

Day of Week

Charges can be valid for a single weekday or the entire week.

Start Time

The fee can be valid between two predefined times of the day. This is the start time for the selected charge fee.

End Time

This is the end time for the selected charge fee.

Start Cost

This is the minimum cost that will be invoiced.

Cost per Minute

Call charge per minute. Charges for the call starts after 'Free Time' has expired.

Remove Fee

Import from .csv

To delete an existing charging fee from a group, click to highlight desired fee and then click the **Remove Fee** button.

3.10.1 Importing fee settings from a CSV format file

Click the **Import from .csv** button to import fee settings.,

The CSV format file contains the following parameters:

<Dialed Number>,<Description>,<Start Cost>,<Cost per Minute>,<Use ICP>

Note that the decimal separator for the *Start Cost* and *Cost per Minute* fields must be a period, ".", The *Use ICP* field can either be 0 (do not use ICP) or 1 (use ICP).

A CSV format file example:

93.,Afghanistan,0.79,6.66,1 355.,Albania,0.79,1.83,1 35538.,Albania-Cellular,0.79,1.83,1 213.,Algeria,0.79,1.77,1 2xxxxxxx,Oslo,0.79,0.2,0 3xxxxxxx,South Norway,0.79,0.2,0

The file should not have any heading and the file extension must be .csv.

The procedure for uploading a fee group is as follows:

- 1. Create a CSV format file with the entries you want to update/add
- 2. Click the **Import from .csv** button in the Fee Setup page
- Use the Choose File to Upload dialog to locate and select the file you want to upload
- 4. You will be prompted to enter the Fee Group number to update
- 5. Click **OK** at the *Fee Group* number prompt and the file will be uploaded and processed

When the file processing is done, a message will be displayed with information on the number of lines imported.

If you enter an existing Fee Group number to update, then existing entries will be updated with new Description, Start Cost and Cost per Minute. Dialed Number and Use ICP code are not updated. If an entry in the CSV format file does not exist in the selected Fee Group, it will be added to the group.

If you enter a *Fee Group* number that does not exist, a new *Fee Group* is created and all entries in the CSV format file will be added to the group.

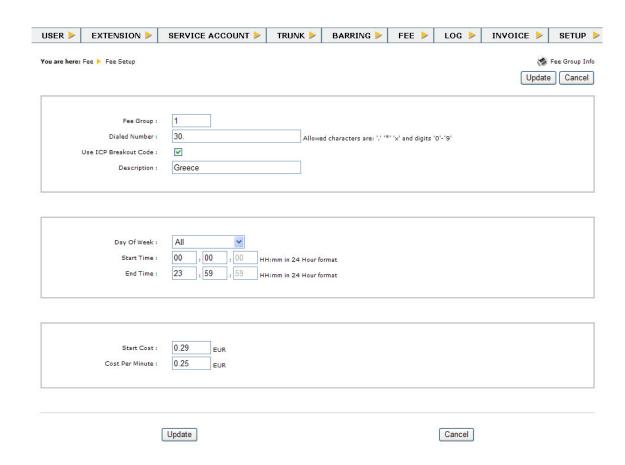
This import function can only handle Fee Groups that have default settings for the Day of Week and Start Time/End Time fields. If there are more than one match on the Dialed Number, then all matches will be overwritten with the values from the CSV format file.

3.10.2 Sorting and searching within groups and call numbers

In the drop-down list for **Show Fee Group** it is possible to select the group to be listed or to show the fee settings for all available groups. In addition, a number or text search can be performed to minimize the listing. Enter the search string in the **Search Dialed Number Starting With** field and click **Apply**. The listing will be sorted in descending order of number of digits for the dialed numbers.

3.10.3 Adding Fees or Changing Fee Settings

- To change an existing fee setup in a group, click the Fee Group number.
- To add a new fee to a group or to create a new fee group, click the Add Fee button.



Examples of Dialed Numbers

Add Fee

400025.	All numbers starting with 400025
4000XXXX	All numbers in range from 40000000 to 40009999
4000.	All numbers starting with 4000
40002X.	All numbers starting with 40002
40002500*	Single number dialed followed by a * keyboard character.

Fee Group

Enter the group number for the actual fee.

Dialed Number

The dialed number that the charging should be valid for.

It can be a complete number or a part of a number including wildcards. Valid digits are 0-9 and *. Valid wildcards are x for single digit or "." (period) for an arbitrary number of digits. If only "." (period) is entered, the charges will be valid for all numbers dialed to the line. The use of wildcard characters are only permitted as the last ones in the number.

Make sure that there is no overlapping in the specified numbers or it may cause an incorrect charge for the call.

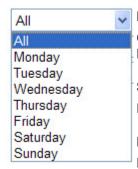
Use ICP Breakout Code

If the number is to be used for international calls, click the International Call Prefix (ICP) checkbox. The call prefix specified in **General Setup** will be added in front of the number and will be shown in the Fee listing page.

Description

Enter a description of the number.

Day Of Week:



Day of Week

Charging can be valid for a single day of the week or the entire week. Make the selection (**All** or **Monday - Sunday**) from the drop-down list.

Start Time

Enter the start time in the format HH:mm.

End Time

Enter the stop time in the format HH:mm.

Avoid gaps in time settings if the same dialed number is specified for different time periods of the day in the same fee group. It may cause an incorrect charge for the call.

Start Cost

Enter a start cost for the call if desired. Depending on the type of trunk connection, the start cost can vary between different operators.

Cost Per Minute

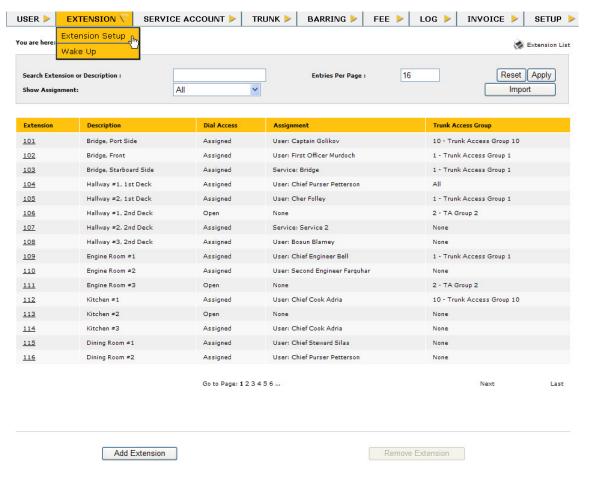
Enter a charge cost.

Click the **Update** button to save the settings.

3.11 Extension Setup

All the extension numbers in the exchange that should have access to external Trunk lines have to be programmed into the Billing system. The system has the capacity to handle a fully equipped AlphaCom exchange for 552 extensions.

From the menu, select **EXTENSION** > **Extension Setup** to open the Extension main page.



The page provides an overview of the existing extension numbers programmed into the Billing system. The extension numbers are sorted in ascending order and displays the most basic information about the access rights to external lines. Outgoing calls from an extension can be made in one of two different ways, either in open mode, e.g. direct access to an external line when the trunk number is dialed, or with a predefined PIN code that is entered after the trunk number is dialed.

In both the cases mentioned above, additional verifications of access rights to the line will be carried out.

The Trunk Access Group provides access to the trunks that are available for the Extensions.

Remove Extension

To remove an existing extension, highlight the number wanted and click the **Remove Extension** button. The extension can not be removed if non-invoiced calls exist in the logs. A warning message will appear on screen.

3.11.1 Importing Extensions

To import all extensions from the AlphaCom configuration database and add them to the extension table, click the **Import** button.

Extensions that already exist in the extension table will not be overwritten or changed by the import function.

If extensions are deleted from the AlphaCom (through AlphaPro), they must be deleted manually from the extension table.

When importing extensions, trunk numbers will also be saved as extensions and must be deleted after the import. These trunks will also be imported because trunks have feature number 83. Extensions from all nodes other than the local node are also defined as feature number 83.

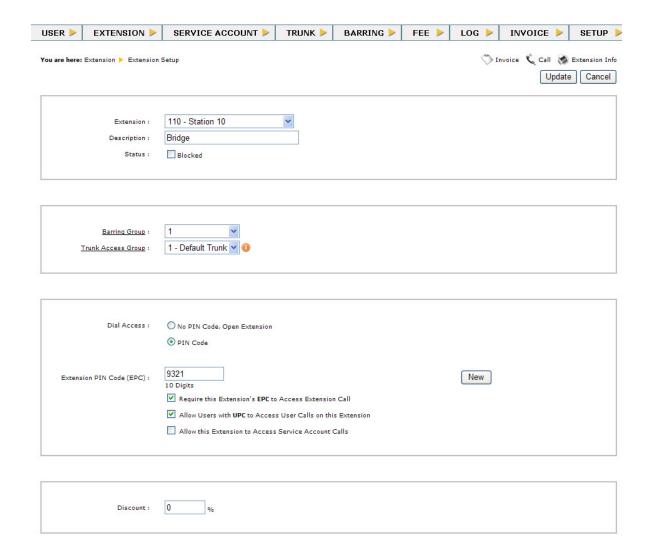
3.11.2 Adding Extensions or Changing Extension Settings

To change an existing extension setup, click on the number and the 'Extension Setup' editing page will be opened.

To add a new extension number to the Billing system, click the **Add Extension** button and the Extension Setup editing page will be opened.

Add Extension

Import



The setup page for extensions includes a number of settings that has to be specified.

Extension

The extension that should be included for Billing is selected from a drop-down list where all available directory numbers in the AlphaCom exchange are collected and displayed. Note that extensions must be programmed in the Billing program to get access to trunk lines.

Description

Enter a briefly description for the extension. This may be the cabin number, location, etc. The default is the description as already programmed via AlphaPro or a first time cold start of the exchange.

Status

Status shows the current Dial Access of the Extension if it is not a normal Extension. The status shows whether it is blocked, or assigned to a user or service account. The Extension list will show the same status.

Barring Group:

Select the desired Barring Group from the drop-down list.

The group number containing barred telephone numbers is found in Barring Setup. The default value is 'None', i.e. not used.

Trunk Access Group:

Select the desired Trunk Access Group from the drop-down list.

The Trunk Access Group gives access to one or more trunks. One trunk can be a member of several Trunk Access Groups. There are options to select None (which effectively blocks the User) or All (which gives access to all trunks).

Dial Access

There are 2 radio buttons to choose from:

- No PIN Code, Open Extension
 - Direct access to Trunk lines without PIN Code.
- PIN Code
 - Access to Trunk lines after PIN Code verification. When this button is selected the editing field for the PIN Code is opened.

Extension PIN Code (EPC)

Enter a unique PIN code or click the **New** button to automatically generate a PIN code. The number of digits in the PIN code is set in the **PIN Code Size** parameter under **SETUP > General Setup**.

Click the checkboxes according to the desired access requirements:

- Require this Extension's EPC to Access Extension Call
- Allow Users with UPC to Access User Calls on this Extension
- Allow this Extension to Access Service Account Calls

Discount

A general fee discount in percent can be entered for the extension. If no value is entered, the charging of the call will be as specified in **Fee Setup**.

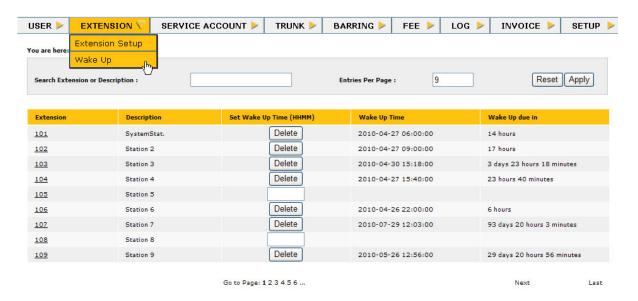
Click the **Update** button to save the settings.

The **Invoice** link will direct to a page where invoices can be displayed for a single day or for a range of days. Selected calls can be marked as invoiced.

The **Call** link will direct to a page where a printout can be made for a log of all external call activities for the extension number for a single day or range of days.

3.12 Wake Up

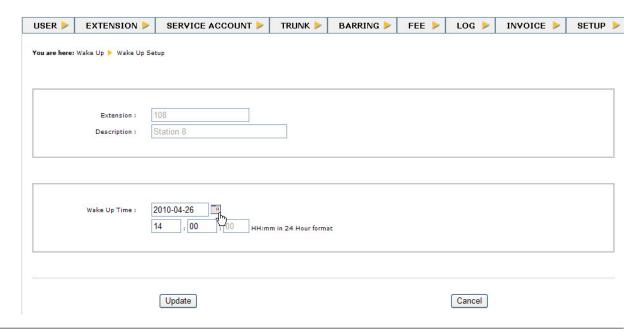
From the menu, select **EXTENSION** > **Wake Up**.



Wake up times are set in the 24-hour notation.

There are two ways of setting the wake up time for the desired extension:

- To set a wake up time within the next 24 hours, the edit field under Set Wake Up Time (HHMM) can be used. The time is entered in a 4 digit, 24 hour format (HHMM), but if only one or two digits are entered (for example '8' or '08') it will be interpreted as 0800 hours. After entering the time, press the TAB key to move to the edit field for the next extension.
 - If the entered time has already passed today, the wake up function will interpret it as tomorrow. For example, if the time now is 12:00 and the entered time is 08:00, then the wake up time will be set at 08:00 tomorrow.
- To set a wake up time that is more than 24 hours ahead, click on the Extension number to open the setup page and use the Calendar to select a date and enter the wake up time in the 24 hour format.

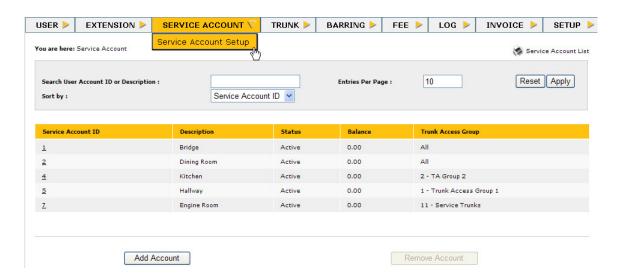


It is not possible to set Wake Up time on stations or the web interface when the extensions are on AlphaNet - the station has to be connected to the Billing node.

3.13 Service Account Setup

A Service Account is a sort of common account where several work-related calls can be made at the same time and with one PIN code. All calls that are work-related will then be logged on this account. If configured, the system may require users to use their PIN code to access the Service Account. The call is still logged on the Service Account but the user's data is logged according to identity.

By selecting **SERVICE ACCOUNT** > **Service Account Setup** in the menu bar the Service Account overview page will be opened.



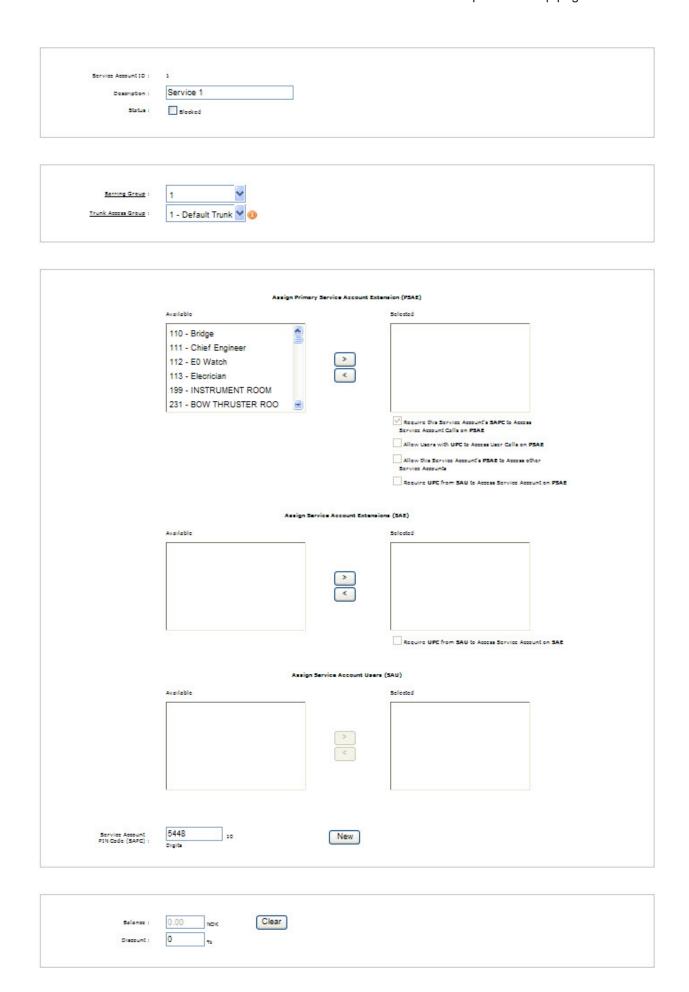
Add Account

Remove Account

- To add a new service account, click the Add Account button. This
 will open the Service Account Setup page where a new user can
 be set up.
- To change a service account, click the ID number. This will open the Service Account Setup page.
- To remove a service account from the system, highlight the account and click the Remove Account button.

3.13.1 Adding an Account or Changing Account Settings

Click Add Account or the ID number to open the setup page.



Service Account ID

This is a unique Identification Number for the specific Service Account. This is automatically assigned by the system and can not be changed.

Description

Enter a brief description for the service account. The default is the description as already programmed via AlphaPro or a first time cold start of the exchange.

Status

Status shows the current Dial Access of the Service Account. The status shows whether it is blocked or not.

Barring Group

Select the desired Barring Group from the drop-down list.

The group number containing barred telephone numbers is found in Barring Setup. The default value is 'None', i.e. not used.

Trunk Access Group:

Select the desired Trunk Access Group from the drop-down list.

The Trunk Access Group gives access to one or more trunks. One trunk can be a member of several Trunk Access Groups. There are options to select None (which effectively blocks the User) or All (which gives access to all trunks).

Primary Service Account Extension (PSAE)

Highlight the available extensions and click the right-arrow button to assign extensions to the PSAE box.

The Primary Service Account Extension is an extension assigned to a Service Account. This means that the Service Account user can make calls without using a PIN code and the call will be logged in the Service account Log. However, if other users are allowed to make User calls or Service Account calls on the PSAE, then a PIN Code is required. The PIN code can be used to identify which user has used the service account to call. In this case, the user name will be logged into the Service Account log.

Click the following checkboxes according to access rights required:

- Require this Service Account's SAPC to Access Service Account Calls on PSAE
 - the service account PIN code is enabled for accessing service account calls from this extension
- Allow Users with UPC to Access User Calls on PSAE
 - PSAE is now enabled for accessing user calls
- Allow this Service Account's PSAE to Access other Service Accounts
 - other service accounts can be accessed from this extension
- Require UPC from SAU to Access Service Account on PSAE
 - this will enable the identification of the user making the call and require SAUs to use their own PIN codes to access service account calls from this extension.

An Extension can NOT be assigned to both a User and a Service Account at the same time.

Service Account Extensions (SAE)

Highlight the available extensions and click the right-arrow button to select the SAEs.

In addition to the Primary Service Account Extension, it is possible to define and enable other extensions to access the Service Account. The SAE can be a normal Extension, PUE or a PSAE that is enabled for Service Account calls.

To activate the **Service Account Users** available list, click the following checkbox:

• Require UPC from SAU to Access Service Account on SAE

 this will enable the identification of the user making the call and require SAUs to use their own PIN codes to access service account calls from this extension.

Service Account Users (SAU)

Highlight the available users and click the right-arrow button to select the SAUs.

A Service Account User is one that is enabled to access the Service Account in the User setup, and can optionally be used for identification in a particular service account.

Service Account PIN Code (SAPC)

Enter a unique PIN code or click the **New** button to automatically generate a PIN code. The number of digits in the PIN code is set in the **PIN Code Size** parameter under **SETUP > General Setup**.

Balance:

This shows the Service Account's current billing account balance. Click the **Clear** button to clear the account and set the balance to 0.

Discount:

Enter the percentage value for the fee discount.

If no value is entered, the charging of the call will be as specified in **Fee Setup**.

Click **Update** to save the new account settings.

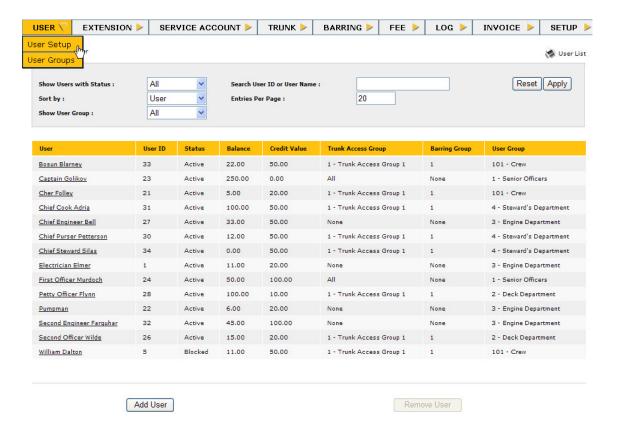
3.14 User Setup

An extension number can be assigned to a User. An Extension number assigned to a User is called a Primary User Extension (PUE). All calls from this Extension will be logged as User calls, meaning that the user can make calls without having to enter a PIN code..

The system has the capacity to handle up to 400 Users. The identification of Users is specified in this setup.

From the menu, select **USER** > **User Setup**.

An overview page for all Users in the Billing system will be displayed.



User

Name of the User

User ID

This is a unique User Identification Number for the specific User. This is assigned from the system and can not be changed.

Status

The User can be set into different states such as Blocked, Active, or Deleted. This column shows the actual setting.

Balance

The actual balance for the User's account.

Credit Value

If the User has been provided with a credit limit to the account it will be shown here.

Trunk Access Group

This is the Trunk Access Group that the user is assigned to.

Barring Group

The dialled digits to the line will be checked against the 'Barring' table which, if desired, is programmed with certain telephone numbers or area codes that should be blocked.

User Group

This is the User Group that the User is a member of.

The **Show Users with Status** drop-down list is a filter function where either all users or only users with status *Active*, *Deleted* or *Blocked* are displayed.

The **Sort by** drop-down list gives the possibility of sorting by options. The list can be sorted with respect to User, Status, User ID, or User Group.

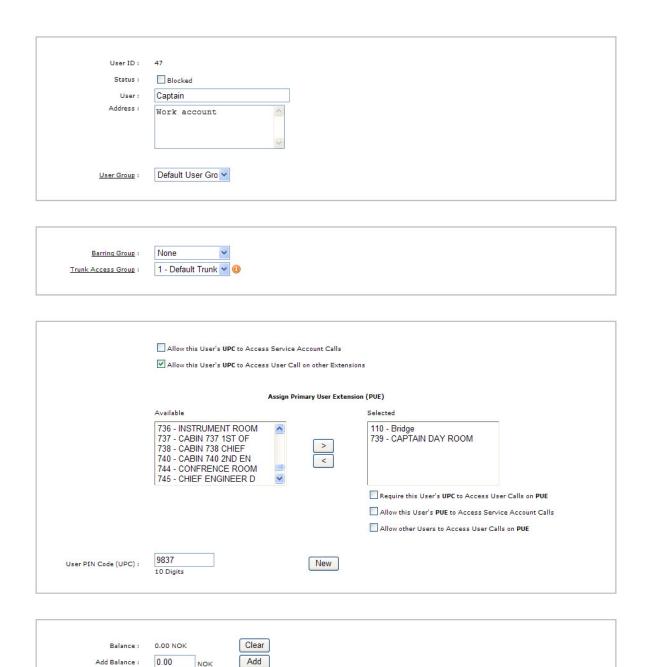
Remove User

• To delete an existing User, highlight the user name and click the Remove User button. The User will then have status Deleted in the listing. To delete the User permanently, click the Remove User button again. The User will be deleted from the User listing and all call logs for the actual user will be deleted from the Billing system. The User can not be deleted if calls that have not yet been invoiced exist in the log. A warning message will be displayed on screen.

3.14.1 Adding Users or Changing User Settings

Add User

- To change an existing User setup, click the item link under the User column.
- To add a new User to the Billing system, click the Add User button.



Credit Value :

0

✓ Unlimited

NOK

The setup page for the User includes a number of settings that need to be specified.

User ID:

This is an ID number generated by the system as a unique identification of the user. The number is generated after clicking **Update**.

Status:

Allow or block Users to get access to the trunk lines. Typical use is to block crew shifts which are on leave.

User:

Name of User.

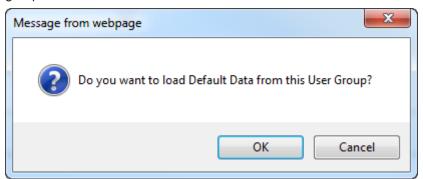
Address:

User address.

User Group

Select the desired User Group from the drop-down list.

When a User is assigned to a User Group, all default settings from the particular User Group will be loaded. Existing users who change to another User Group will be prompted to load default values from the new group.



Barring Group:

Select the desired Barring Group from the drop-down list.

This is the group number containing barred telephone numbers found in **Barring Setup**. The default value is *None*, i.e. not used.

Trunk Access Group:

Select the desired Trunk Access Group from the drop-down list.

The Trunk Access Group gives access to one or more trunks. One trunk can be a member of several Trunk Access Groups. There are options to select None (which effectively blocks the User) or All (which gives access to all trunks).

User PIN Code (UPC)

To allow UPC access:

- Click the Allow this User's UPC to Access Service Account Calls checkbox.
- Click the Allow this User's UPC to Access User Call on other Extensions checkbox.

Primary User Extension (PUE)

Click the right-arrow button to assign extensions to the PUE box.

The Primary User Extension (PUE) is an extension assigned to a user.

All calls from this Extension will be logged as User calls. This also means that the primary user can make calls without using a PIN code. However, if other users are allowed to make User calls or Service account calls on the PUE, a User PIN Code is required, both for other users and the primary user.

Click the following checkboxes according to access rights:

- Require this User's UPC to Access User Calls on PUE
- Allow this User's PUE to Access Service Account Calls
- Allow other Users to Access User Calls on PUE
 - other users' UPCs have to be enabled for access

User PIN Code (UPC):

Enter a unique PIN code or click the **New** button to automatically generate a PIN code. The number of digits in the PIN code is set in the **PIN Code Size** parameter under **SETUP > General Setup**.

Balance:

This shows the User's current billing account balance. The user can contact the operator in order to buy credit for trunk calls or clear the account.

- Click the Clear button to clear the User's account and set the balance to 0.

Add Balance:

In order to add credit to the User's balance, the operator must:

- enter the amount
- click Add button

The balance is updated to the new amount.

Credit Value:

This shows the User's allowed credit value before trunk calls are blocked. If the **Unlimited** checkbox is checked, the Credit Value is cleared and trunk calls will not be blocked.

Discount:

Enter the percentage value for the fee discount.

If no value is entered, the charging of the call will be as specified in **Fee Setup**.

Click the **Update** button to save the settings. If no changes should take place use the **Cancel** button to go back to the previous page.

Print links

In the upper right part of the setup page' three print links are available:

- The *Invoice* print link will open the *User Invoice* page where invoices can be displayed for a single day or for a selectable range of days. In the invoice print page selected calls can be marked as invoiced.
- Call Log is the call logging link for printing all external call activities for the extension number. A single day or a range of days may be selected.
- User Info is the link for printing the actual settings for the specific user.

3.15 User Groups

Users can be assigned to a User Group. Various settings can be applied to all members in a group through the **User Groups** page. Users may be members of Barring Group, Trunks Access Group, Balance, Credit Value, Discount, etc.

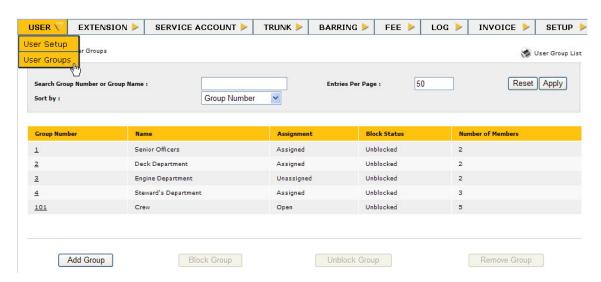
A User Group is normally assigned by default to a Login Account. Login Accounts are available through the **Setup > Administration** menu. When logging in with this account, only the members of the assigned User Group and members in *Open* Groups are available. Login Accounts with the password level *Administrator* always have access to all User Groups.

Open Groups are not assigned to a specific Login Account but are available to all.

It is possible to unblock or block all members in a User Group by highlighting the Group and clicking the **Unblock Group** or **Block Group** buttons.

Free text search string and drop down menu for searching and sorting the User Groups.

From the menu select **USER** > **User Groups** and the User Groups main page is displayed. This is the overview page for all User Groups in the Billing system.



Group Number

Number of the Group.

Name

Name of the Group.

Assignment

This shows whether the Group is *Assigned*, *Unassigned*, or *Open* to a particular Login Account. User Groups are assigned under **SETUP** > **Administration**.

Block Status

The User Group can be set into different states. This column shows the actual status, i.e. whether the members in the group are *Blocked* or *Unblocked*.

Number of Members

This column shows the number of members in the group.

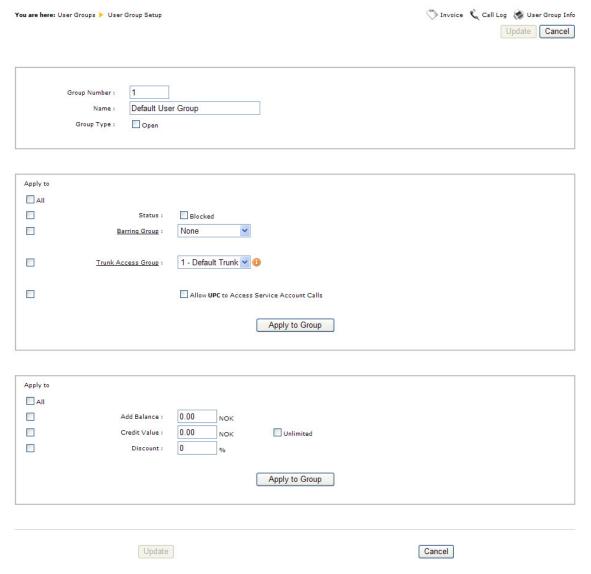
Free text string search is available via the **Search Group Number or Group Name** field.

The **Sort by** drop-down list enables sorting by Group Number or Group Name.

3.15.1 Adding Groups or Changing Group Settings

- To remove an existing User Group, highlight the user group and click the Remove Group button.
- To block or unblock an existing User Group, highlight the user group and click **Block Group** or **Unblock Group** respectively.
- To change an existing Group setup, click the Group Number and the User Group Setup page will be opened.
- To add a new Group to the Billing system, click the **Add Group** button and the User Group Setup page will be displayed.





It is possible to apply all settings by clicking the **Apply to All** checkbox or clicking individual checkboxes and value before applying to the members of the User Group.

The **Update** button is only enabled when changing Group numbers, names and types or when adding a new User Group.

The User Group Setup page includes several settings that have to be specified.

Group Number:

Enter a unique ID number for the Group.

Name:

Enter a name for the Group.

Status:

Allow or block Groups from getting access to the trunk lines. Typical usage is to block crew shifts that are on leave.

Group Type:

Click the checkbox to set the group type to Open if desired. The status will be shown under the **Assignment** column.

Barring Group:

The group number containing barred telephone numbers found in **BARRING** > **Barring Setup**. Default value is *None*, i.e. not used.

Trunk Access Group:

The trunk access group that the user group belongs to. Default value is *None*, i.e. not used.

Click the **Allow UPC to Access Service Account Calls** checkbox to enable access.

Add Balance:

In order to add credit to the User Group's balance, enter the amount in the field.

The balance is updated to the new amount.

Credit Value:

This shows the User Group's allowed credit value before trunk calls are blocked. If the **Unlimited** checkbox is checked, the Credit Value is cleared and trunk calls will not be blocked.

Discount:

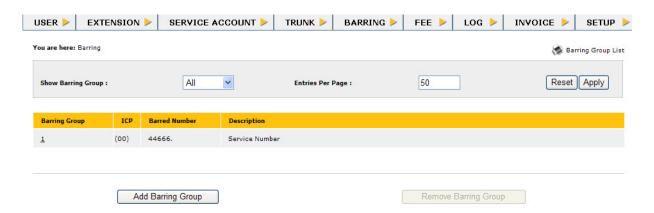
Enter the percentage value for the fee discount.

If no value is entered, the charging of the call will be as specified in **Fee Setup**.

Click **Apply to Group** to enable the settings.

3.16 Barring Setup

Select **BARRING** > **Barring Setup** in the menu bar to display a listing of all Barring Groups and barred numbers in the Billing system. The dialed digits to the line will be checked against this table which, if desired, is programmed with certain telephone numbers or area codes that should be blocked.



Barring Group

Each User and Extension can belong to one Barring Group. Settings for the group are defined in the Barring Setup page.

ICP

International Call Prefix as specified in General Setup.

Barred Number

This shows the numbers that are barred.

Valid characters are:

- '0' to '9' dialling digits
- '*' keyboard character
- '.' Allow unlimited number of digits after last defined digit
- 'x' Can be replaced with any digit

Description

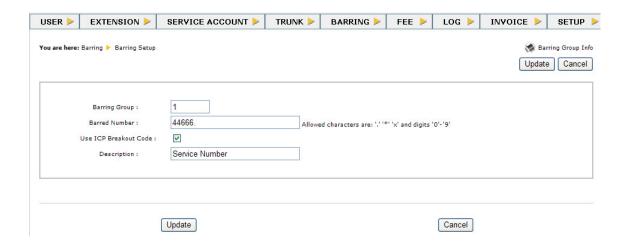
Free text information about the barred number.

3.16.1 Adding Barring Groups or Changing Group Settings

Remove Barring Group

Add Barring Group

- To delete a barring group with barred number, highlight the group and click the **Remove Barring Group** button.
- To change an existing barred number setup in a group, click the group number and the Barring Setup editing page will be opened.
- To add a new barring group with barred number to the Billing system, click the Add Barring Group button and the Barring Setup page will be opened.



To restrict Users and Extensions from calling certain external call numbers, some values have to be entered in the relevant fields.

Examples of Barred Numbers

400025.	All numbers barred starting with 400025
4000XXXX	All numbers in range from 40000000 to 40009999 are barred
4000.	All numbers barred starting with 4000
40002X.	All numbers barred starting with 40002
40002500*	Barred single number dialed followed by a * keyboard character.

Barring Group:

Enter a Barring group number where the call number should be included. This group number has also to be set in the User and Extension setups.

Barred Number:

Enter the call number. This can be a complete number or a part of a number including wildcards. Valid digits are 0-9 and the asterisk (*) character.

Valid wildcards are x for single digit or "." (period) for an arbitrary number of digits. If only "." (period) is entered, the barring will be valid for all numbers dialled within this group. The use of wildcard characters are only permitted as last characters in the number.

Use ICP Breakout Code:

If the number is an international country and area code or an international telephone number, select the ICP checkbox and the International Call Prefix will be added in front of the number.

Description:

Enter a brief description of the number to be barred.

Click the **Update** button to save the settings. If no changes should take place, click the **Cancel** button.

4 Call Logging & Invoicing

The Billing system provides easy to use capabilities for different type of call logs and for invoicing.

The logging and invoice functions are:

User Call Log

Log of calls made with User PIN Code.

User Transaction Log

History of the transactions made to the Users account.

Extension Call Log

Log of calls made from extensions with Extension PIN Code.

Service Account Call Log

Log of calls made from service accounts with Service Account PIN Code.

Invoice Log

Log of invoices for users and extension.

Call Log Maintenance

Complete log for User and Extension calls.

User Invoice

Invoicing and invoice printout for a specific User.

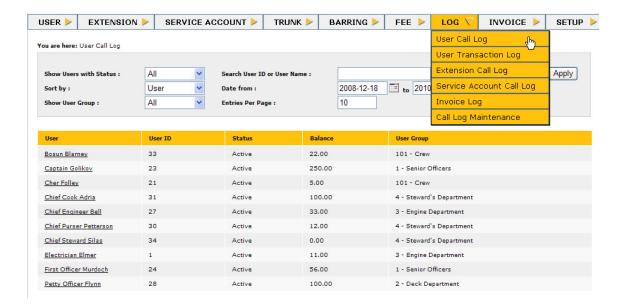
Extension Invoice

Invoicing and invoice printout for a specific Extension number.

In all of the above functions, it is possible to select a time period to sort the information that should be displayed on screen or printed out.

4.1 User Call Log

This is the logging for calls made with User PIN Code. To get access to the user call log select **Log** > **User Call Log** from the menu bar.





Drop-down lists

- The Show Users with Status drop-down list is a filter function where either All users or only users with status Active, Deleted or Blocked are shown.
- The **Show User Group** drop-down list allows the selection of all or a single user group to be displayed.
- The **Sort by** drop-down list gives possibility to sort by options. The list can be sorted with respect to *User*, *Status*, *User ID*, or *User Group*.
- Listing of activities for the users can be shown for a specific day or period of days. Edit the **Date from:** and **to:** fields or select the period by clicking the calendar symbols and picking the dates. Click the **Apply** button to enable the settings.

Only basic information about the Users will be shown, such as:

User

The User's name

User ID

User's unique Identification Number

Status

Current status for the User

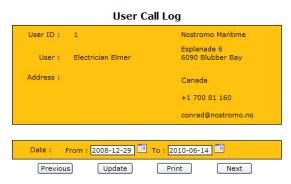
Balance

The actual account balance

User Group

The User's access rights to Trunk lines.

To get more detailed information about the User's activities, click the user name to display the call log for the user.



Start Time	End Time	Extension	Trunk	Fee Group	Dialed Number	Duration
2009-01-05 10:48:17	2009-01-05 10:48:32	2591	001	1 -	400025**	00.00.15
2009-01-05 10:49:04	2009-01-05 10:49:57	591	001	1 -	400025**	00.00.53
2009-01-05 10:50:08	2009-01-05 10:51:14	2591	001	1 -	400025**	00.01.06
2009-01-05 10:51:23	2009-01-05 10:52:05	591	001	1 -	400025**	00.00.42
2009-01-05 10:53:20	2009-01-05 10:53:22	591	001	1 -		00.00.02
2009-01-05 10:53:28	2009-01-05 10:53:44	591	001	1 -	400025**	00.00.16
2009-01-05 10:55:15	2009-01-05 10:55:40	591	001	1 -	400025**	00.00.25
2009-01-23 08:47:21	2009-01-23 08:47:22	4001	001	1 -		00.00.01
2009-01-23 08:50:41	2009-01-23 08:51:51	4001	001	1 -	004917240987**	00.01.10
2009-01-23 08:51:55	2009-01-23 08:52:12	4001	001	1 -	400025**	00.00.17
2009-01-23 08:52:32	2009-01-23 08:54:42	4001	001	1 -	004917240987**	00.02.10
2009-02-12 13:43:48	2009-02-12 13:44:08	591	001	1 -	400025**	00.00.20
					Total Time:	00.07.37

The list will give all personal information about the user and the calls made within the selected time period. The time period can be changed by selecting dates from the calendar icons.

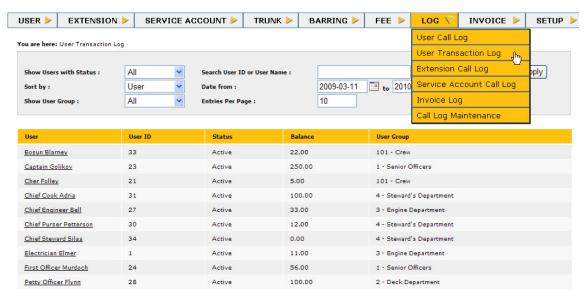
The listing contains the *Start Time* and *End Time* of the call, the *Extension* number from which the call was made, the *Trunk* used for the call, the *Fee Group* used for call charge calculation, the *Dialed Number* and the *Duration* of the call.

Click **Print** to get a hardcopy of the user call log.

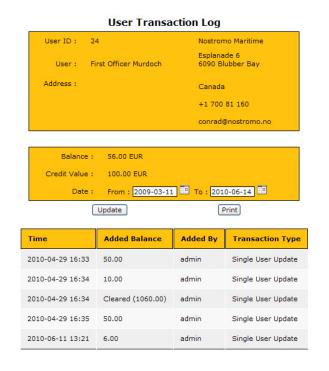
4.2 User Transaction Log

The User Transaction log is an additional logging option to the User Call log. The Transaction log holds the history of all the transactions made in the User's account.

Select **LOG** > **User Transaction Log** from the menu bar.



To get more detailed information about the User's transactions, click the user name to display the User Transaction Log for the user.



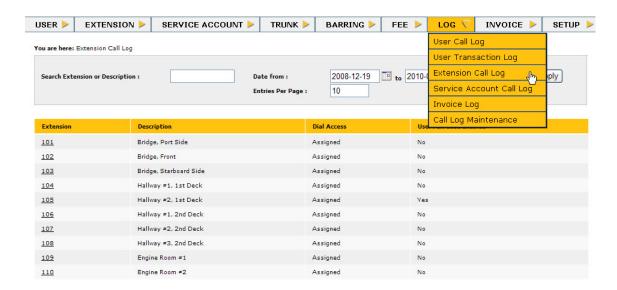
The listing shows the Time when the transaction was made. Added balance is showing the amount that was added and Added By column is showing the system user that was logged in to the Billing system and performed the transaction.

The list will give all personal information about the user and the account transactions made within the selected time period. The time period can be changed by selecting dates from the calendar icons and clicking **Update**.

Click **Print** to get a hardcopy of the user transaction log.

4.3 Extension Call Log

The Extension Call Log is the logging of calls made from extensions with the Extension PIN Code. Select **LOG** > **Extension Call Log** from the menu bar.



Listing of activities for the extensions can be shown for a specific day or period of days. Edit the **Date from:** and **to:** fields or select a period by clicking the calendar icons and picking the dates. Press the **Apply** button to enable the new period.

Extension

The directory number in the exchange.

Description

The station location or subscriber's name.

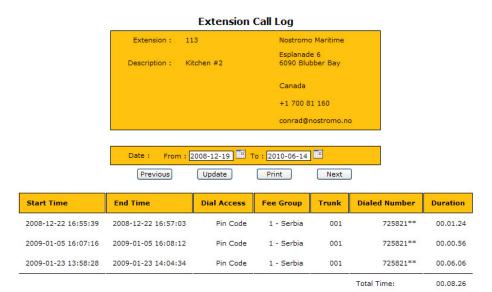
Dial Access

Shows whether Extension PIN Code verification is used.

User PIN Code Enabled

User PIN Code dialing is enabled from this extension.

To show detailed information about the Extension calls, click the extension number.



The list will give information about the calls made within the selected time period from this extension. The listing contains the *Start Time* and *End Time* of the call, the type of *Dial Access*, the *Trunk* used for the call, the *Fee Group* used for call charge calculation, the *Dialed Number* and the *Duration* of the call.

The time period can be changed by selecting dates from the calendar icons and clicking **Update**.

Click **Print** to get a hardcopy of the user transaction log.

4.4 Invoice Log

Whenever calls in the **User Call Log** and **Extension Call Log** are invoiced, the Invoice Timestamp is saved in the **Invoice Log**. This makes it possible to recreate the invoice if necessary. However, if calls are deleted from the call log, either by deleting them through the web interface or the automatic cleanup procedure, they will not appear in the recreated invoice.

Select LOG > Invoice Log from the menu bar.



The information listed includes the *Invoice Time*, *Call Type* (*User* or *Extension*), and the *Total Cost*.

Click the link under the *Invoice Time* column to open the invoice log for that particular time.

Invoice Log 2010-04-26 15:14:25





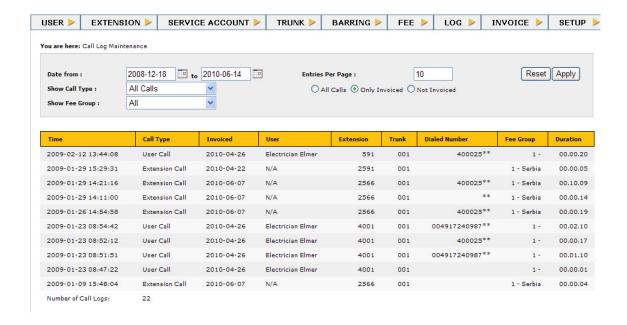
Click Print to get a hardcopy of the invoice log.

Click **Delete** to delete the call listing.

4.5 Call Log Maintenance

This type of call log is an overruled combined logging for all activities for User and Extension calls. The purpose of this log is to easily search and keep track of non-invoiced calls. In case the call is invoiced the date for invoicing is shown. Note that the latest calls are listed first.

Select LOG > Call Log Maintenance from the menu bar.



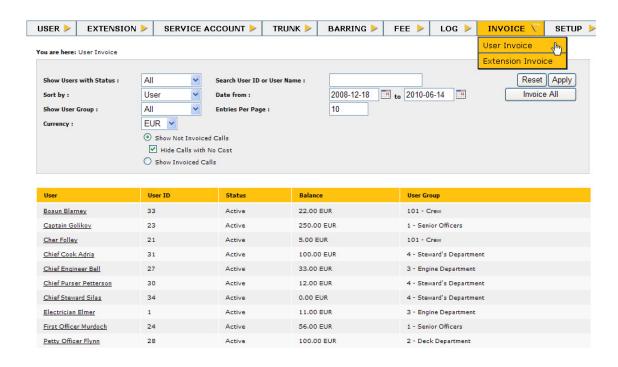
It is not possible to select individual User or Extension calls.

To delete the Call Maintenance Log for a certain period, select the dates from the calendar icons and click the **Delete Call Logs** button.

Only invoiced calls can be deleted from the log.

4.6 User Invoice

Select INVOICE > User Invoice in the menu bar:



- The **Show Users with Status** drop-down list is a filter function where either *All* users or only users with status *Active*, *Deleted* or *Blocked* are shown.
- The **Sort by** drop-down list enables sorting with respect to *User*, *Status*, *User ID* or *User Group*.
- The **Show User Group** drop-down list is a filter function where either *All* users or only users with status *Active*, *Deleted* or *Blocked* are shown.
- There are two radio buttons that provide different listing options in the invoice: one for *Not Invoiced Calls* and one for *Invoiced Calls*.
- The default currency can temporary be changed to a currency of your choice in the invoice by selecting from the **Currency** drop-down list.
 Currency conversion will be done according to the Exchange Rate Setup.
 After selecting the currency, click the user and the invoice will be displayed with the new currency.
- The listing can be shown for a specific day or period of days. Edit the Date from: and to: fields or set the period by clicking the calendar icons and selecting the dates.
- To invoice all the users at the same time, click Invoice All

Invoice All

4.6.1 Creating a User Invoice

To create a user invoice, click the user name under **User**.

Nostromo Maritime : pr. 2010-06-14 14:08:50



Start Charge Time	End Charge Time	Extension	Trunk	Dialed Number	Start Cost	Cost Per Minute	Charging Time	Cost
2008-12-18 17:26:04	2008-12-18 17:26:37	591	001	400025**	0.01 EUR	0.29 EUR	00.00.33	0.17 EUR
2008-12-19 10:07:17	2008-12-19 10:08:08	2749	001	240311**	1.00 EUR	0.50 EUR	00.00.51	1.43 EUR
2008-12-19 10:08:40	2008-12-19 10:09:50	2749	001	330833**	1.00 EUR	0.50 EUR	00.01.10	1.58 EUR
2008-12-19 15:09:26	2008-12-19 15:09:35	591	001	400025**	0.01 EUR	0.29 EUR	00.00.09	0.05 EUR
2008-12-19 15:11:56	2008-12-19 15:12:26	591	001	400025**	0.01 EUR	0.29 EUR	00.00.30	0.16 EUR
2008-12-19 15:16:10	2008-12-19 15:16:24	591	001	400025**	0.01 EUR	0.29 EUR	00.00.14	0.08 EUR
2008-12-19 16:32:12	2008-12-19 16:32:35	2592	001	400025**	0.01 EUR	0.29 EUR	00.00.23	0.12 EUR
		•		,		Total Time/Cost:	00.03.50	3.59 EUR
						Start Balance:		11.00 EUR
						Current Balance:		11.00 EUR
						Additional Discount (on 3.59 EUR):		

The user invoice page will display the actual balance for the user account and the call charges that will be invoiced.

The cost for each call shown on the invoice is the actual cost and includes the fee discount obtained.

The time period can be changed by selecting dates from the calendar icons and clicking **Update**.

Click **Print** to get a hardcopy of the user invoice.

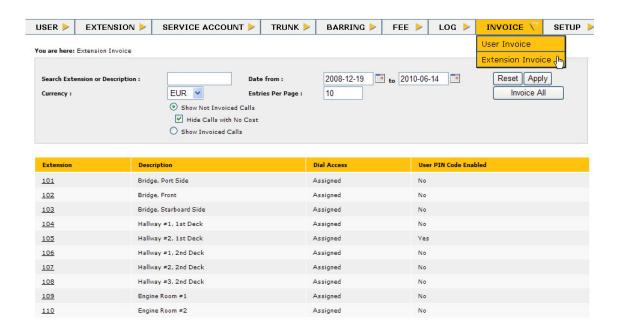
Click **Previous** or **Next** to open the previous or next user invoice in the list.

An *Additional Discount* may be given on the total cost of the invoice in monetary or percentage terms. To give a monetary discount, just enter the value that should be subtracted from the total cost of the invoice. To give a discount in percentage, enter the value followed by % and the new total cost will be calculated and displayed.

Click the **Invoice** button to set the calls as invoiced. This will open the **Invoice Log** page displaying the time stamp for the invoice.

4.7 Extension Invoice

Select INVOICE > Extension Invoice in the menu bar:



- The **Search Extension or Description** field allows the one or several extensions to be displayed using extension number or description.
- There are two radio buttons that provide different listing options in the invoice: one for *Not Invoiced Calls* and one for *Invoiced Calls*.
- The default currency can temporary be changed to a currency of your choice in the invoice by selecting from the **Currency** drop-down list.
 Currency conversion will be done according to the Exchange Rate Setup.
 After selecting the currency, click the user and the invoice will be displayed with the new currency.
- The listing may be shown for a specific day or period of days. Edit the Date from: and to: fields or set the period by clicking the calendar icons and selecting the dates.

4.7.1 Creating an Extension Invoice

To create an extension invoice, click the extension number under **Extension**.

3.35):



Start Charge Time	End Charge Time	Dial Access	Trunk	Dialed Number	Start Cost	Cost Per Minute	Charging Time	Cost
2009-01-07 17:41:32	2009-01-07 17:42:24	PIN Code	001	928689**	1.00 EUR	0.50 EUR	00.00.52	1.43 EUR
2009-01-07 17:42:47	2009-01-07 17:44:37	PIN Code	001	613190**	1.00 EUR	0.50 EUR	00.01.50	1.92 EUR
						Total Time/Cost:	00.02.42	3.35 EUR
						Additional Discount (on		

The time period can be changed by selecting dates from the calendar icons and clicking **Update**.

Click **Print** to get a hardcopy of the user invoice.

Click **Previous** or **Next** to open the previous or next extension invoice in the list.

An *Additional Discount* may be given on the total cost of the invoice in monetary or percentage terms. To give a monetary discount, just enter the value that should be subtracted from the total cost of the invoice. To give a discount in percentage, enter the value followed by % and the new total cost will be calculated and displayed.

Click the **Invoice** button to set the calls as invoiced. This will open the **Invoice Log** page displaying the time stamp for the invoice.

Invoice Log 2010-06-17 14:37:09



Delete

Start Charge Time	End Charge Time	Call Type	User	Extension	Trunk	Dialed Number	Start Cost	Cost Per Minute	Charging Time	Cost
2009-01-07 17:41:32	2009-01-07 17:42:24	Extension Call	N/A	2512	001	928689**	1.00 EUR	0.50 EUR	00.00.52	1.43 EUR
2009-01-07 17:42:47	2009-01-07 17:44:37	Extension Call	N/A	2512	001	613190**	1.00 EUR	0.50 EUR	00.01.50	1.92 EUR
2009-01-16 10:33:57	2009-01-16 10:33:57	Extension Call	N/A	2512	001	400026**	1.00 EUR	0.50 EUR	00.00.00	0.00 EUR
								Total Time/Cost:	00.02.42	3.35

A Abbreviations

CSV Comma Separated Values

EPC Extension PIN Code

GSM Global System for Mobile communications

ICP International Call Prefix

PABX Private Automatic Branch Exchange

PSAE Primary Service Account Extension

PUE Primary User Extension

SAE Service Account Extension

SAPC Service Account PIN Code

SAU Service Account User

UPC User PIN Code

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