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Installation and Configuration
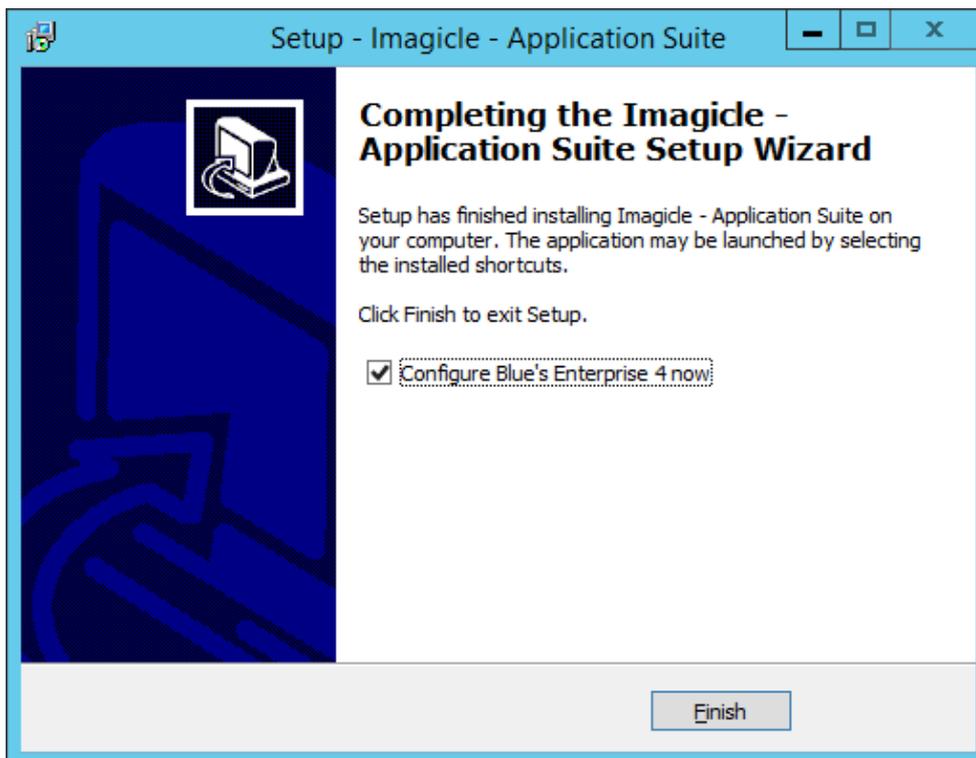
Blue's Enterprise 4 Installation

For best results, we recommend configuring Imagicle Billing performing the following steps in exact order in this exact sequence:

- Install the Application Suite Setup package
- The Setup will ask some general information and ask will you to execute Imagicle Billing Configuration Wizard
- At the end of wizard, login to the web interface and add users
- Configure the PBX to send CDRs through FTP to the Application Suite server
- Configure the Application Suite general parameters
- Through the Administrative page check that all Imagicle Billing services are up and running
- If you own a valid license, activate it using the License page, otherwise the Application Suite will run in evaluation mode for 30 days.
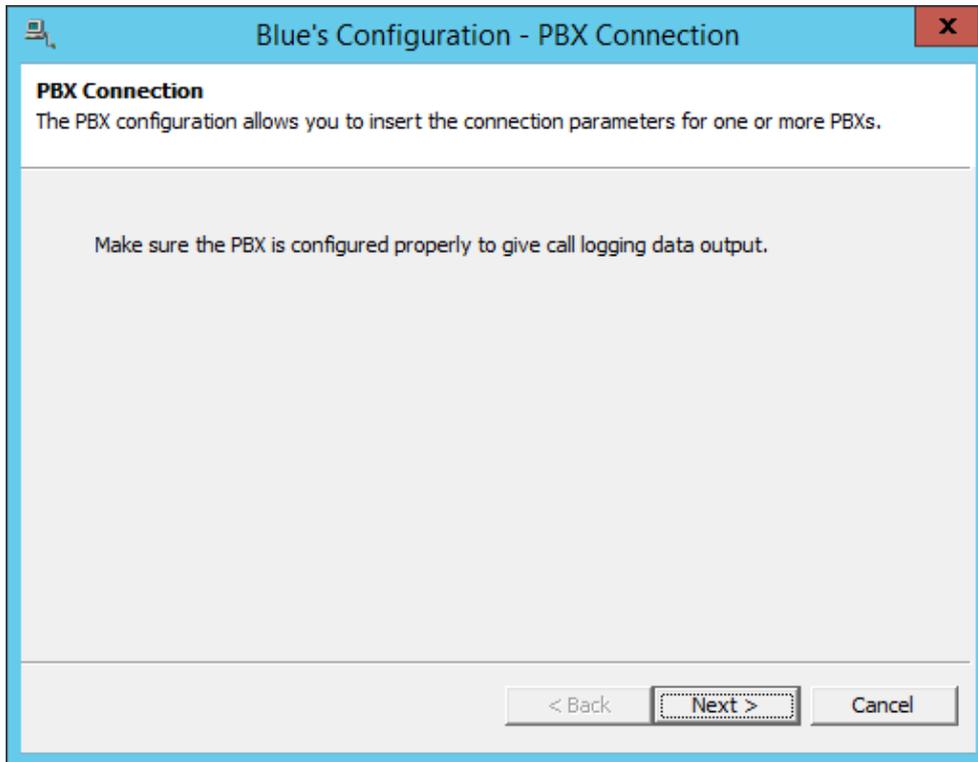
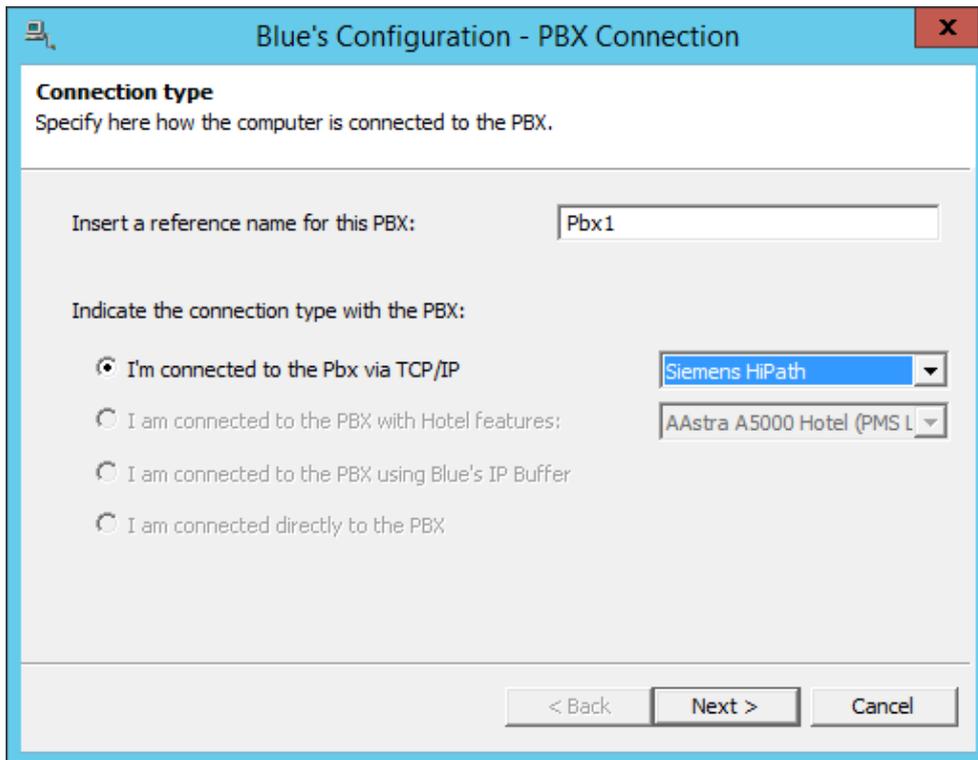1. Right click on the setup file > Run as Administrator
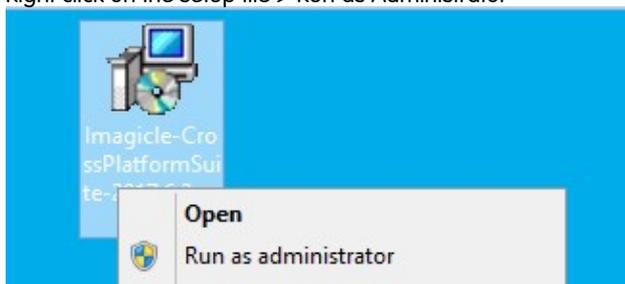
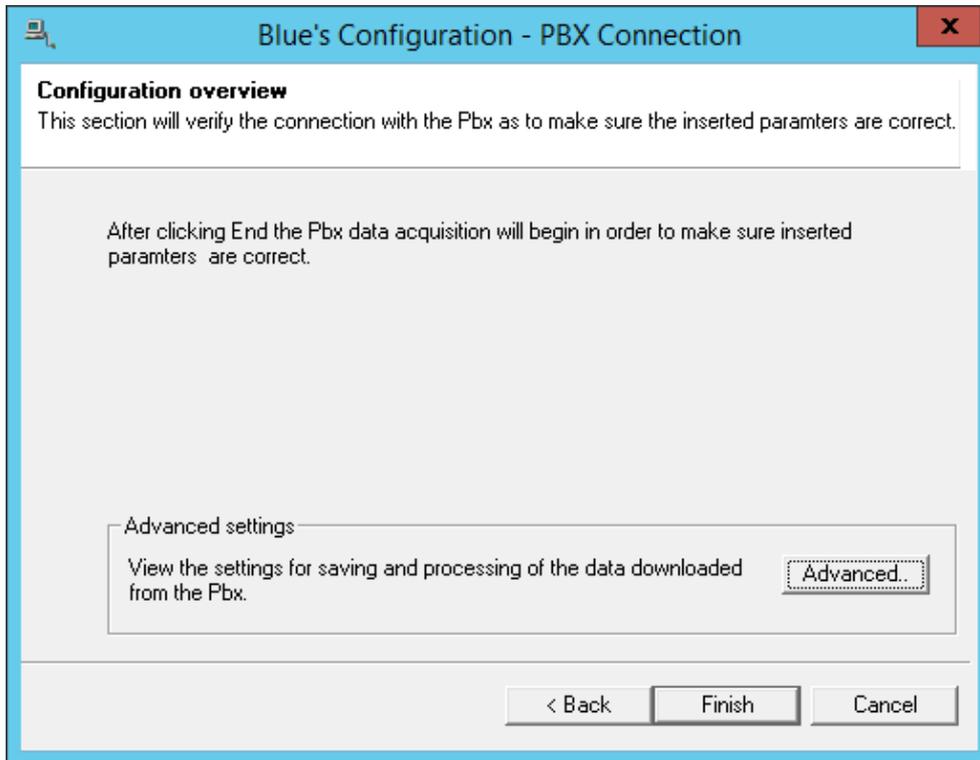2. At the end of the setup click [Finish] to configure Blue's Enterprise 4

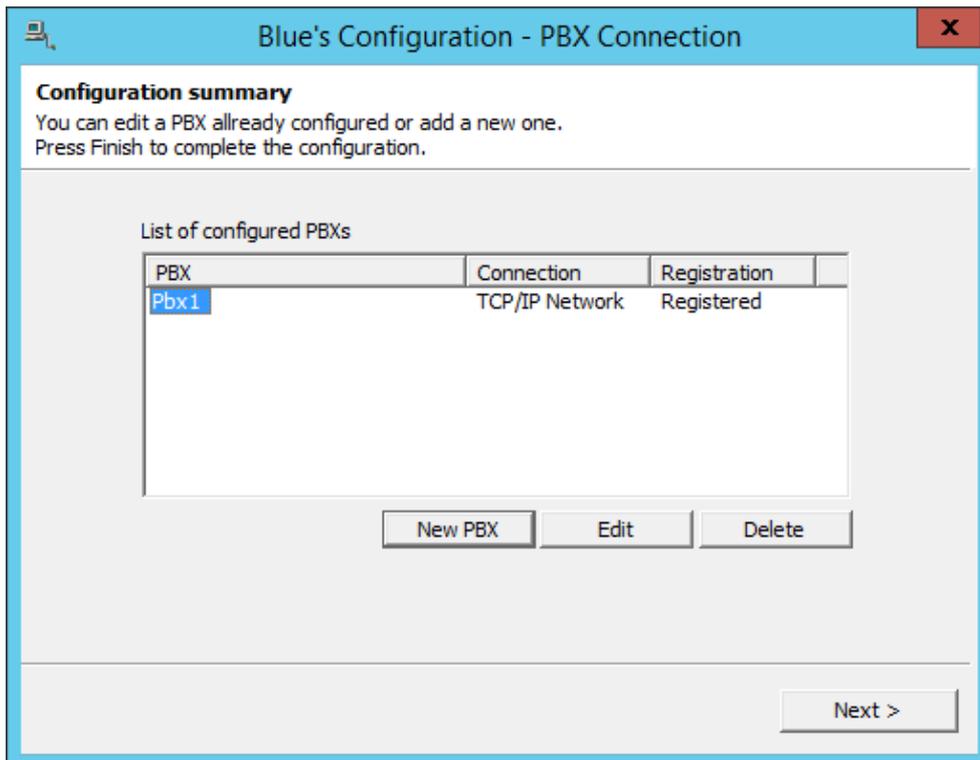3. Configure the PBX Connection for the first SITE

![Blue's Configuration - PBX Connection dialog]

PBX Connection
The PBX configuration allows you to insert the connection parameters for one or more PBXs.

Make sure the PBX is configured properly to give call logging data output.

[< Back] [Next >] [Cancel]

4. Select the connection according to the Brand and Model of the PBX.
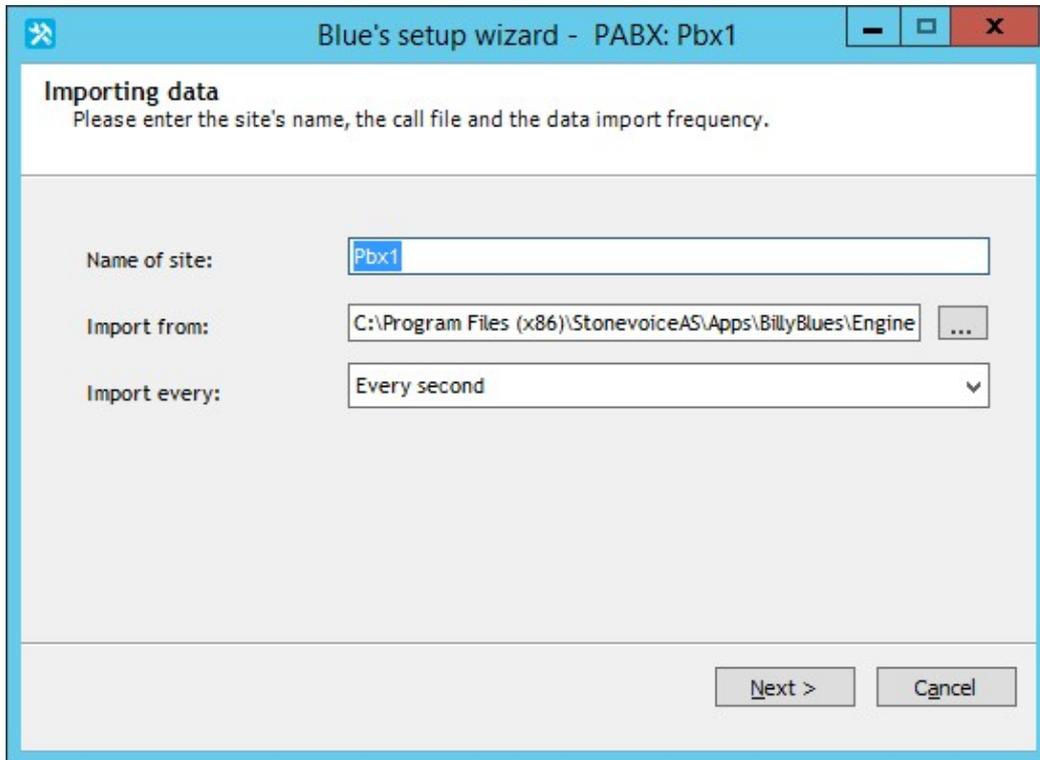   Enter the required parameters for the connection to acquire the CDRs.

![Blue's Configuration - PBX Connection - Connection type dialog]

Connection type
Specify here how the computer is connected to the PBX.

Insert a reference name for this PBX: Pbx1

Indicate the connection type with the PBX:

⦿ I'm connected to the Pbx via TCP/IP   Siemens HiPath ▼

○ I am connected to the PBX with Hotel features: AAstra A5000 Hotel (PMS L ▼

○ I am connected to the PBX using Blue's IP Buffer

○ I am connected directly to the PBX

[< Back] [Next >] [Cancel]
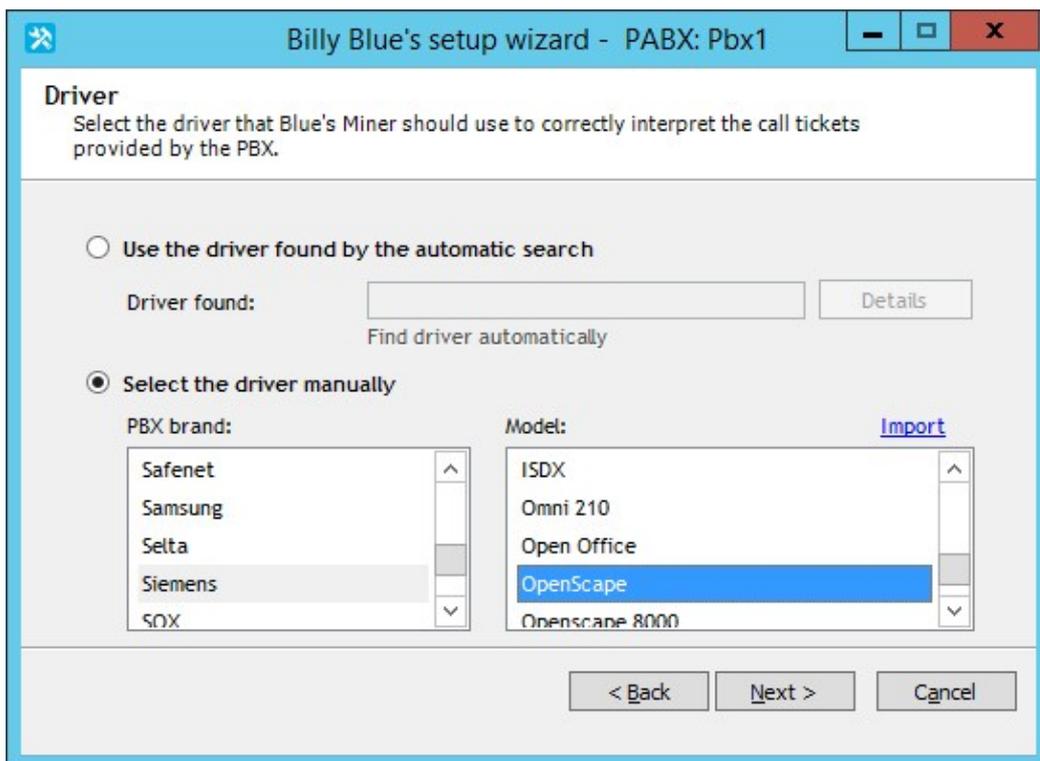
5. Click on [Finish] to end the configuration.

6. Click [New PBX] to configure a new connection to another PBX or [Next >] to continue the configuration.
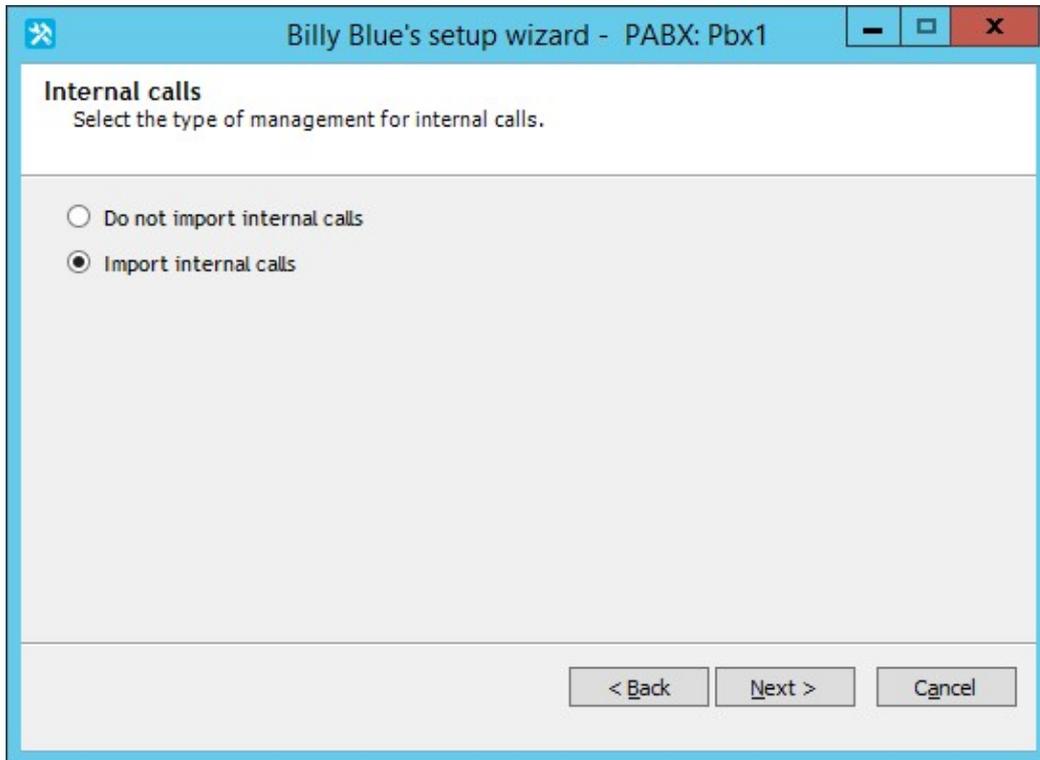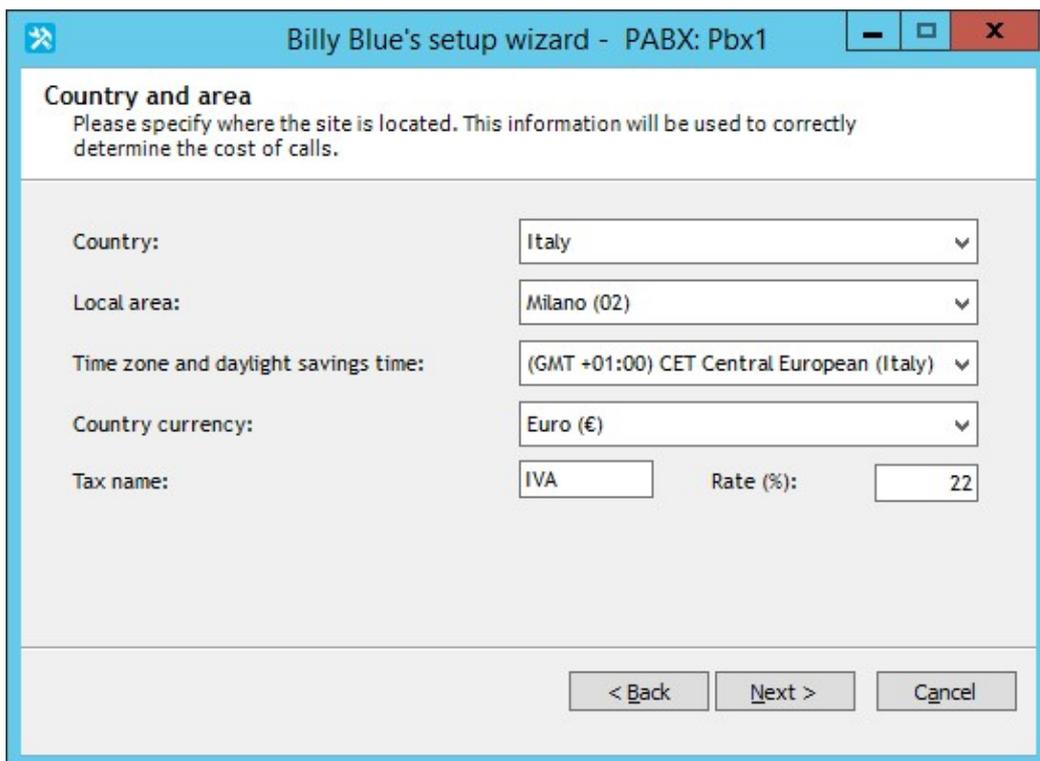

7. Configure the new SITE.

![imagicle]

Blue's setup wizard - PABX: Pbx1

Importing data
Please enter the site's name, the call file and the data import frequency.

Name of site:	Pbx1
Import from:	C:\Program Files (x86)\StonevoiceAS\Apps\BillyBlues\Engine ...
Import every:	Every second

Next >   Cancel

8. Select the Driver of your PBX Model.

Billy Blue's setup wizard - PABX: Pbx1

Driver
Select the driver that Blue's Miner should use to correctly interpret the call tickets provided by the PBX.

○ Use the driver found by the automatic search

Driver found: [   ]   Details
Find driver automatically

● Select the driver manually

PBX brand:	Model:	Import
Safenet	ISDX	
Samsung	Omni 210	
Selta	Open Office	
Siemens	OpenScape	
SOX	Openscape 8000	

< Back   Next >   Cancel

9. Choose the relevant option if you want to import the internal call or not.

```
╔═══════════════════════════════════════════════════════════════╗
║ ⚒  Billy Blue's setup wizard -  PABX: Pbx1      ─  □  X        ║
╠═══════════════════════════════════════════════════════════════╣
║ Internal calls                                                ║
║   Select the type of management for internal calls.           ║
╟───────────────────────────────────────────────────────────────╢
║    ○  Do not import internal calls                            ║
║    ⦿  Import internal calls                                   ║
║                                                               ║
║                                                               ║
║                                                               ║
║                                                               ║
║                                                               ║
║                                                               ║
║                                                               ║
║                      [ < Back ]  [ Next > ]    [ Cancel ]     ║
╚═══════════════════════════════════════════════════════════════╝
```

10. Select the Country and Local Area of the Site.

```
╔═══════════════════════════════════════════════════════════════╗
║ ⚒  Billy Blue's setup wizard -  PABX: Pbx1      ─  □  X        ║
╠═══════════════════════════════════════════════════════════════╣
║ Country and area                                              ║
║   Please specify where the site is located. This information will be used to correctly ║
║   determine the cost of calls.                                ║
╟───────────────────────────────────────────────────────────────╢
║   Country:                          Italy                  ∨  ║
║                                                               ║
║   Local area:                       Milano (02)            ∨  ║
║                                                               ║
║   Time zone and daylight savings time:  (GMT +01:00) CET Central European (Italy) ∨ ║
║                                                               ║
║   Country currency:                 Euro (€)               ∨  ║
║                                                               ║
║   Tax name:            IVA            Rate (%):         22     ║
║                                                               ║
║                      [ < Back ]  [ Next > ]    [ Cancel ]     ║
╚═══════════════════════════════════════════════════════════════╝
```

11. Select a Tariff.
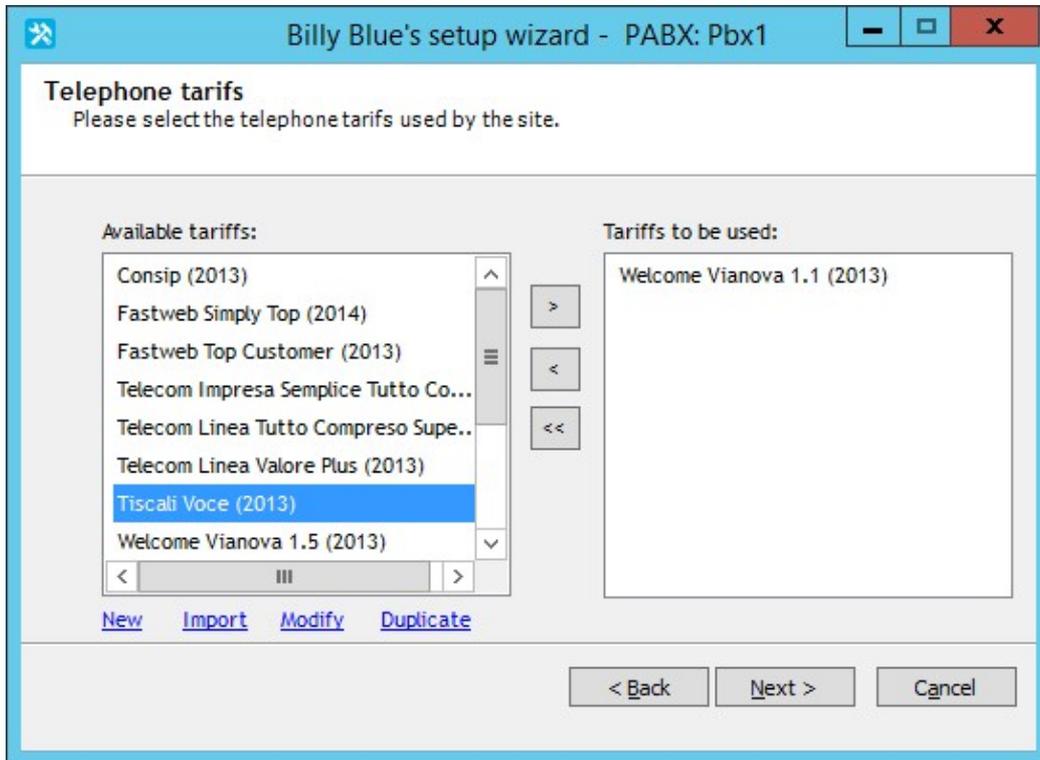
12. Click [Next >] until you reach the end of the configuration.
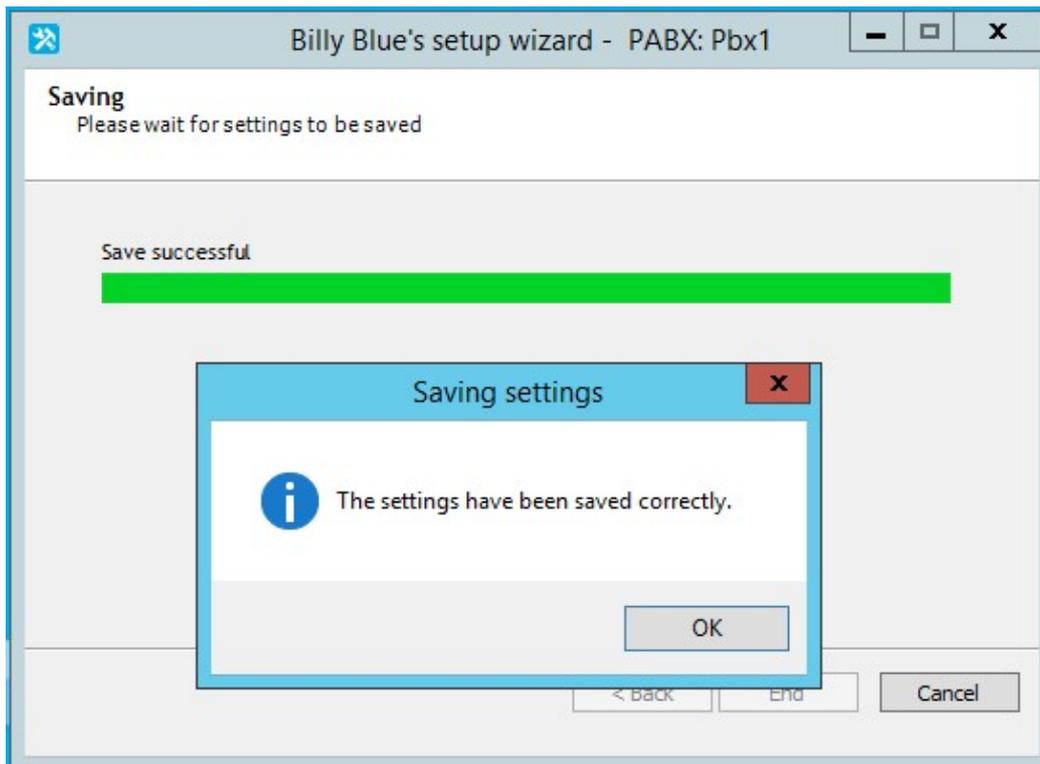
13. The firs SITE is configured. If you have more than one site you can configure here or Click [Next >] to finish the configuration.
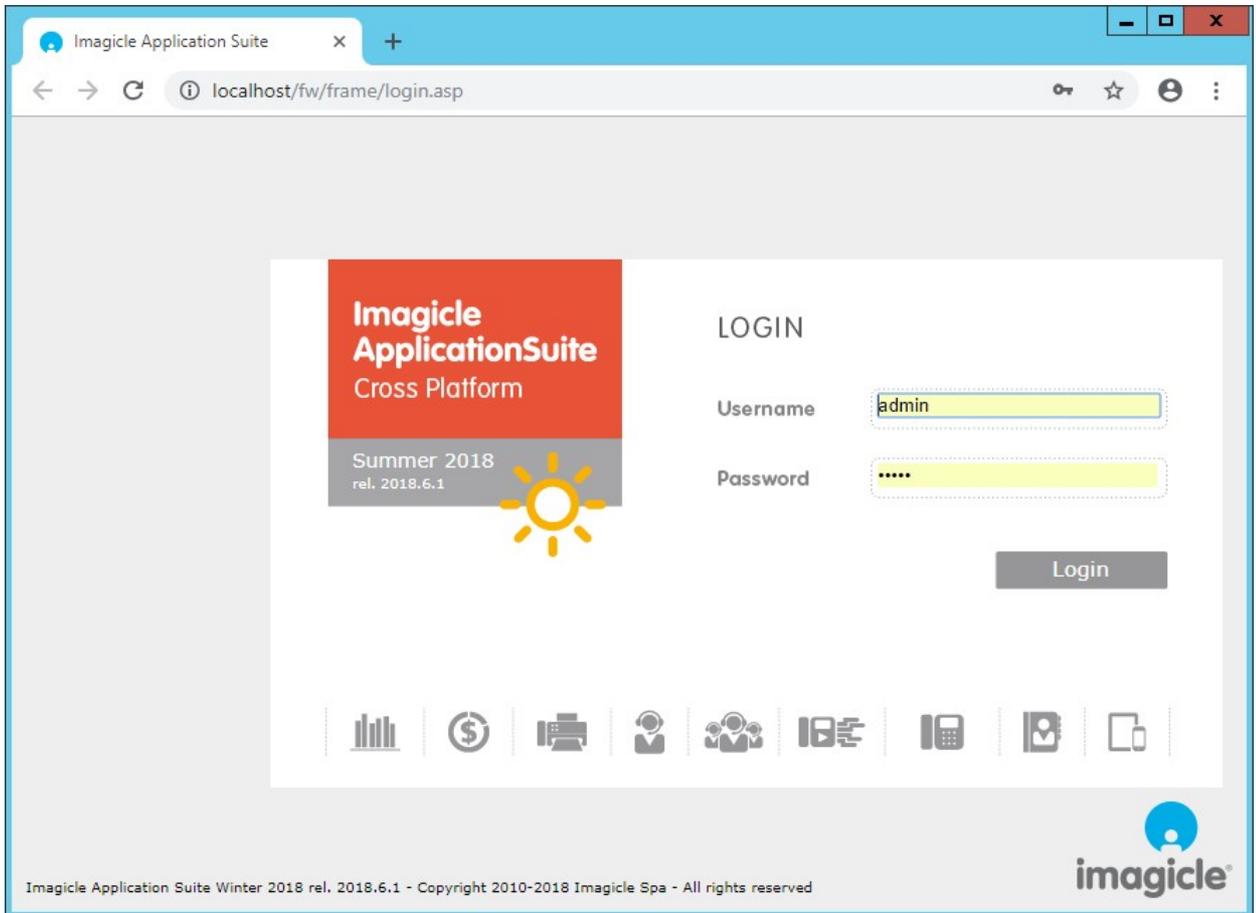
Blue's Enterprise 4 Configuration
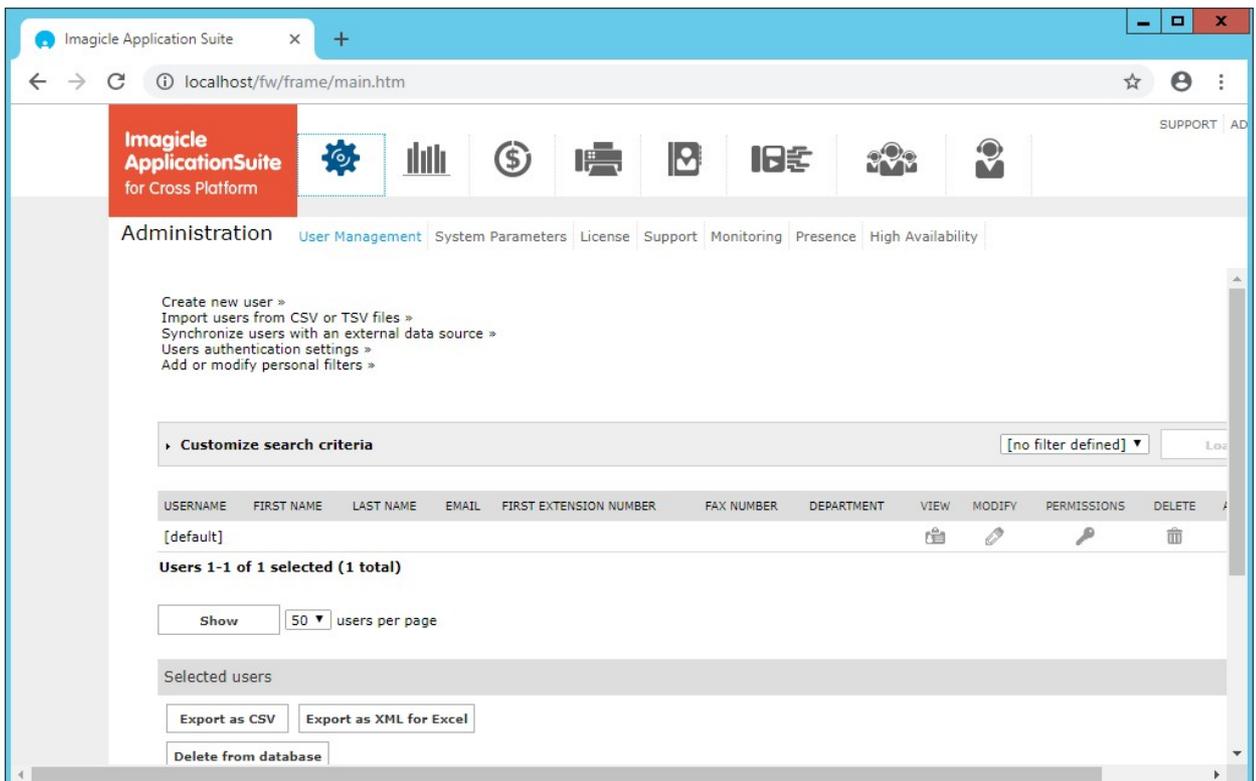
imagicle

1. Click to Start > All Apps > Imagicle AS Administration to open the IAS Web page.
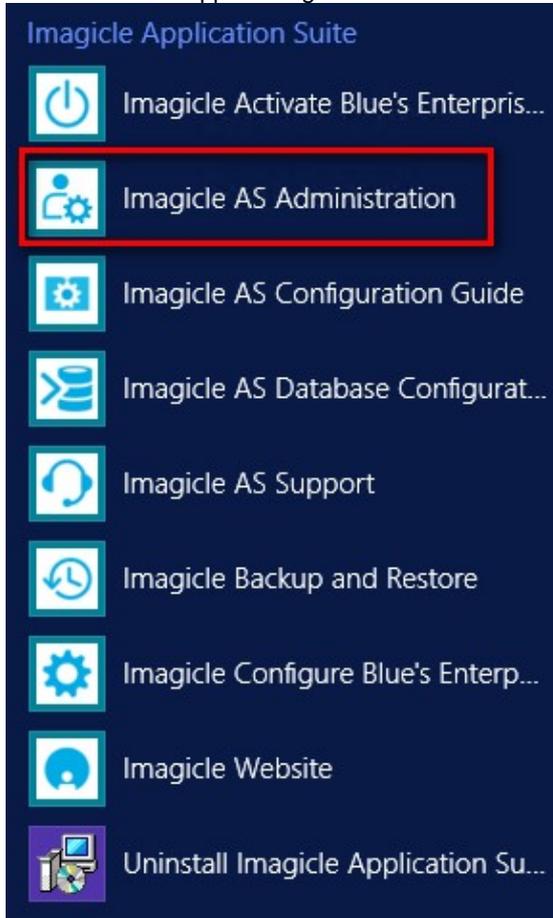
2. Enter the Username and Password, by default admin / admin

3. First click to Admin > User Management to create the new users for each devices or sync to your Active Directory.

4. if you cannot sync the IAS to your AD and you want to enter all users manually with their First Extension Number the best practise is to:
Click to 'Create new user >>'
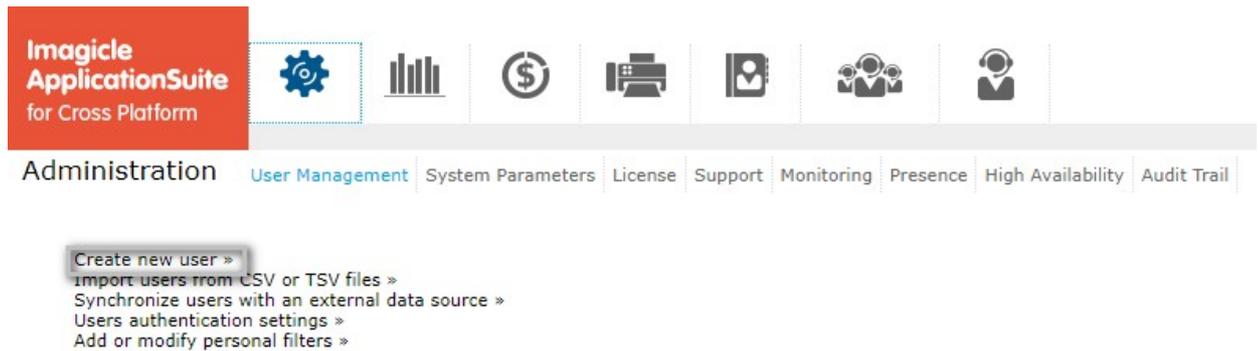
5. Fill in all the necessary fields.
Mandatory are the 'Username', 'First extension number' and 'Enable Billing for the first extension number'.
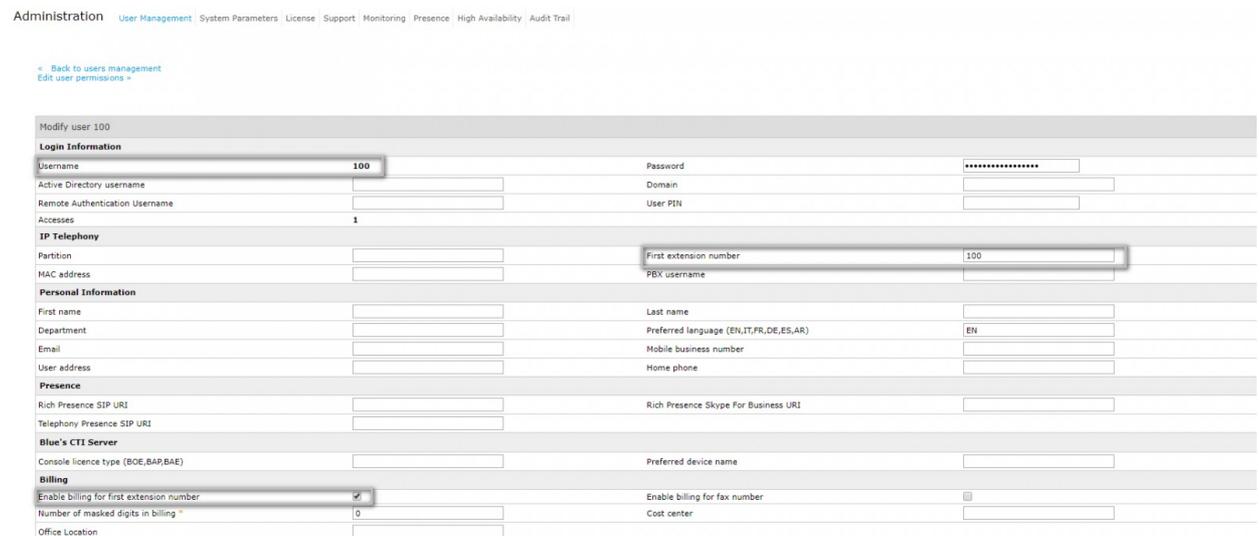
6. Click [Add new user] at the bottom of the page.
7. The first user is created.
8. Click [Export as CSV] to save the Users.csv file.
Use this file as a template, modify it and add new users easily with Excel.
9. Save the file with the same format CSV (MS-DOS)
10. Click to ' Import users from CSV or TSV files >> ' to import it with the new users.

Account Codes Management

This feature, available starting from 2020.Winter.1 release, allows to define a list of account codes, each associated to a description, CostCenter and number of digits to be masked in remote party number (for privacy).

When an user performs an outbound call adding a previously defined account code, Imagicle Call Analytics:

- assigns the call to Account's Cost Center
- Partially hides some digits, as per privacy setting
- optionally, Account description is displayed, instead of its Code.

This feature requires a Call Analytics PBX driver which supports Account Codes. Please check your PBX vendor for further details.

Account Codes Definition

Please access to Imagicle web portal as administrator and select *Call Analytics â Administrative Pages â Manage Accounts* menu:
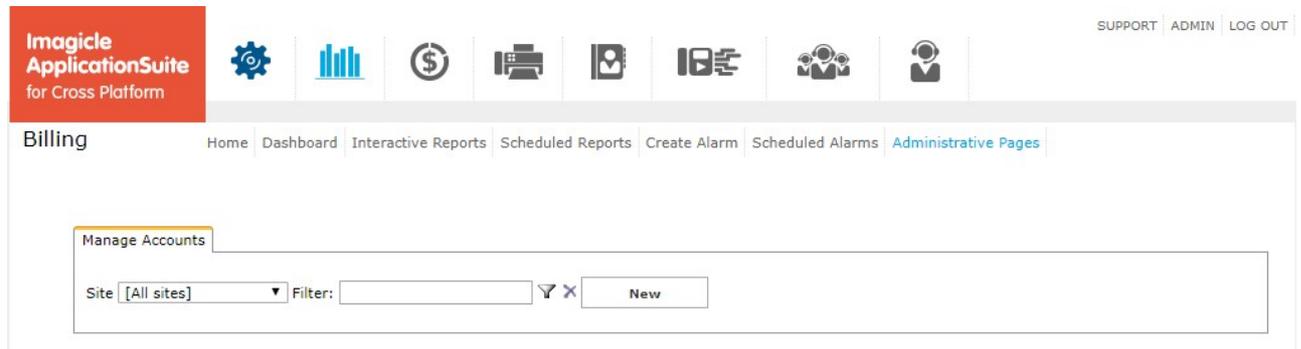
Hit New to create a new Account Code:
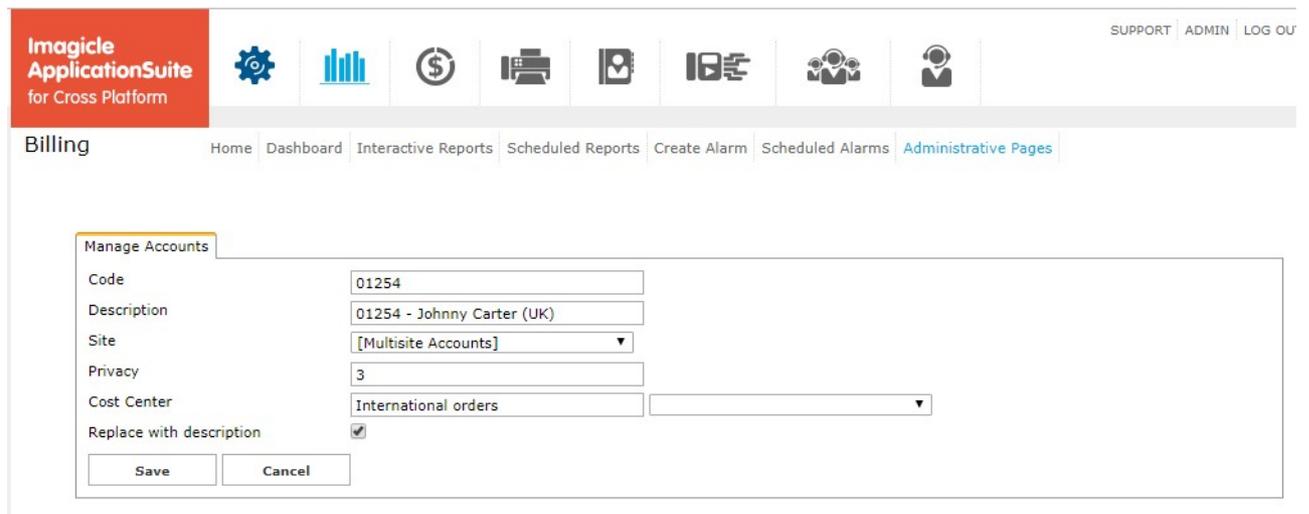
Fields description:

- **Code**: Account Code. It should match the code received from PBX CDR. Not case sensitive.
- **Description**: Account description. This value is displayed in both "Account" reports column and reports filter, if below "replace with description" flag is set.
- **Site**: You can select a specific "SITE" (PBX) or just set it to "Multisite", if same Account Code is used in each and every site in your IP Telephony network.
- **Privacy**: allows to mask last nn digits of remote party PSTN number, only for calls associated to this Account Code.
- **Cost center**: This is the Cost Center to whom calls are associated, for this specific Account Code.
- **Replace with description**: If this flag is set, reports' "Account" fields is populated with Account description. Otherwise, Account Code is displayed.

Manage Accounts page can be filtered by Sites or other fields. Moreover, you can sort the Account list by clicking on column's label:

Engine operations

While importing outbound calls CDRs for a Site, Call Analytics driver extracts Account Code and seeks for a match in previously populated Account Code table, checking both Account Code and Site code (if any).

If a match is found, Cost Center field is overwritten with Account Code's Cost Center, privacy's digit masking is applied and, if configured, Account description is saved into Call Analytics' "sCommessa" database field.

If no Account Code match is found, call fields are populated as usual.

Account Code matching is applied to outbound calls ONLY. Inbound calls and internal calls are not affected.

If some calls are processed before Account Codes have been added, you can still add missing Account Codes from "Manage Accounts" and run a "Recalculate Calls" routine to properly assign previous calls to the correct Account. See below screenshot sample:

Please note that if Account Code is replaced with its description, after calls recalculation it won't be possible to retrieve the initial Account Code, for a match with those included in "Manage Accounts" table.

Known limitation

Call recalculation does not apply remote party digit masking, even if applied for relevant Account Code.

Troubleshooting

If an non-existing Account Code is included in an acquired CDR, it will be written in a specific warning line included in this log file: C:\Program Files (x86)\StonevoiceAS\Apps\Billyblues\Engine**process2008.log**
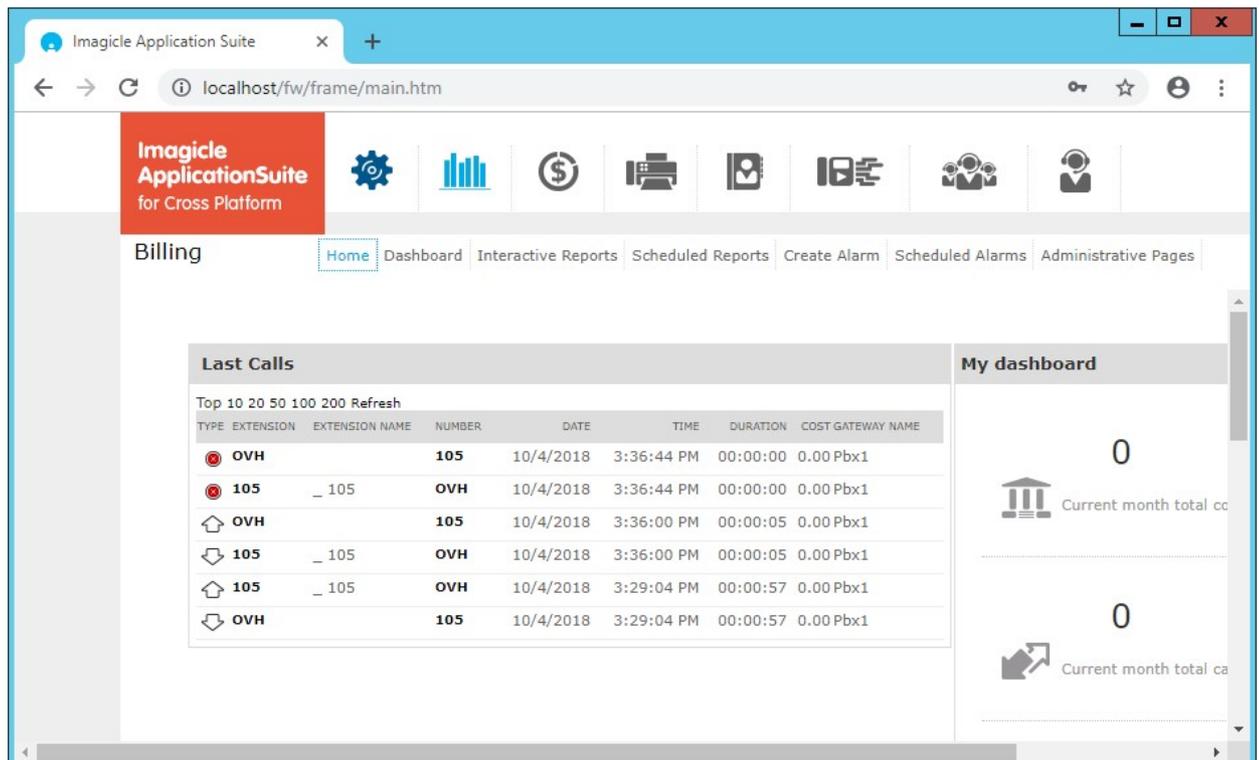

Above sample shows a non-existing Account Code=5555, retrieved from "SITE" PBX.

Using Billing and Reports

1. Click to 'Billing' > Home to see the latest imported calls.

2. Click to 'Billing' > Interactive Reports to use the available web reports.

3. For each report it is possible to define a filter by clicking on 'Options'.
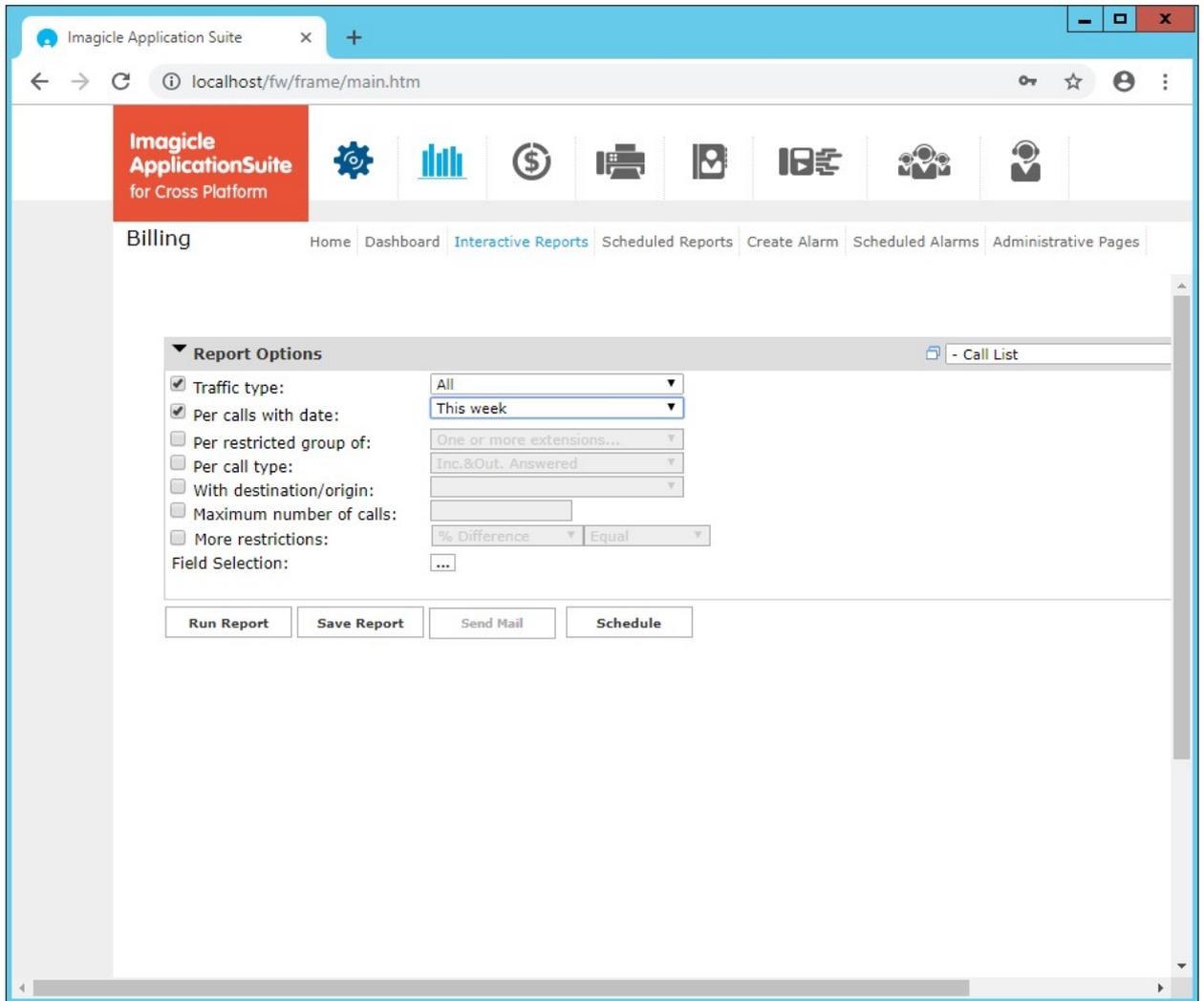
4. Here an example of the 'Call List' report.

5. Here the complete Blues'Enterprise 4 - User guide :   https://kbp.imagicle.com/kb/afile/139/67/
6. Click to 'Admin' > System Parameters > SMTP Parameters to Configure the SMTP parameters to send alert email or the Scheduled Reports.
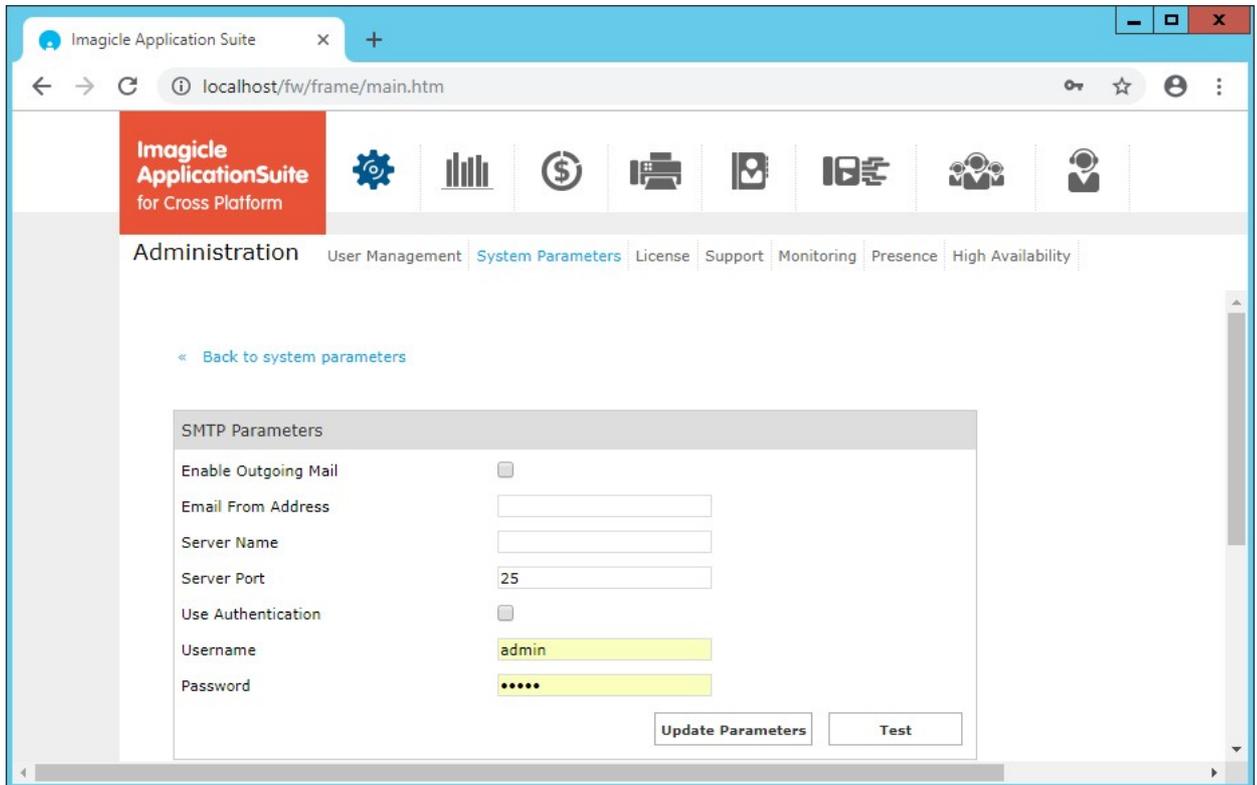
7. From the Billing > Administrative Pages we have some tools to analyse the system and check for proper operation.
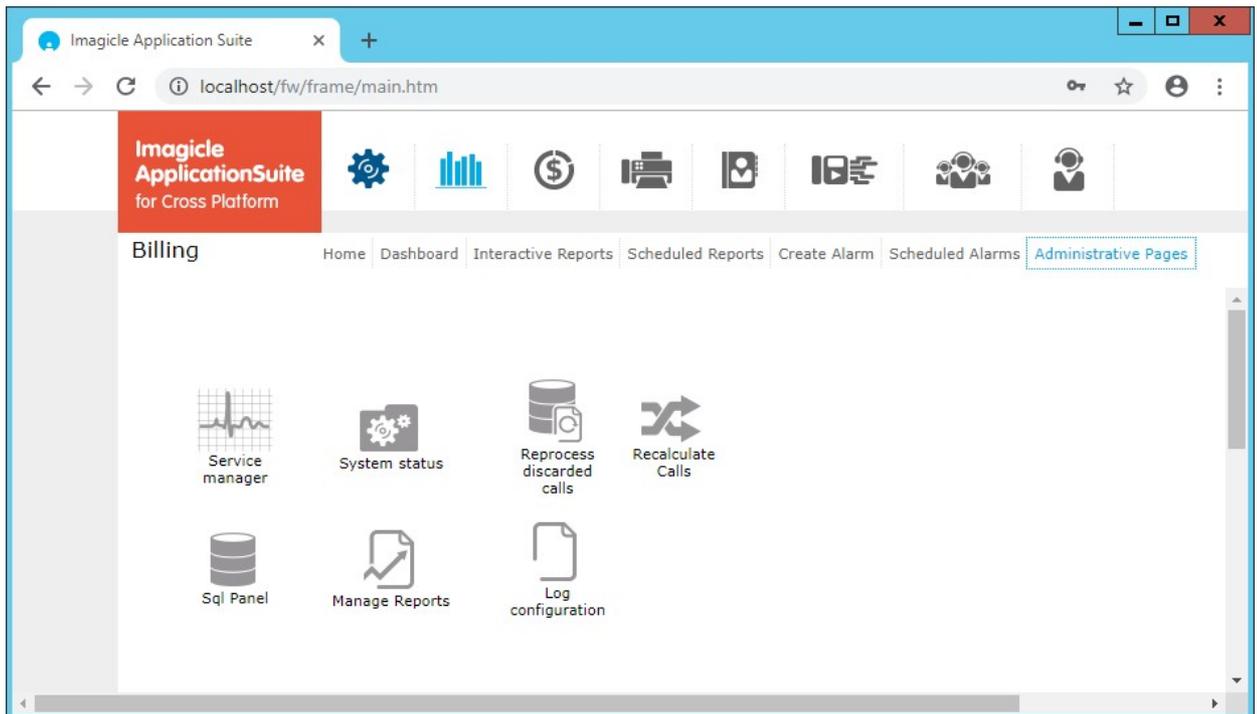
8. This is the architecture of the importation of CDRs.
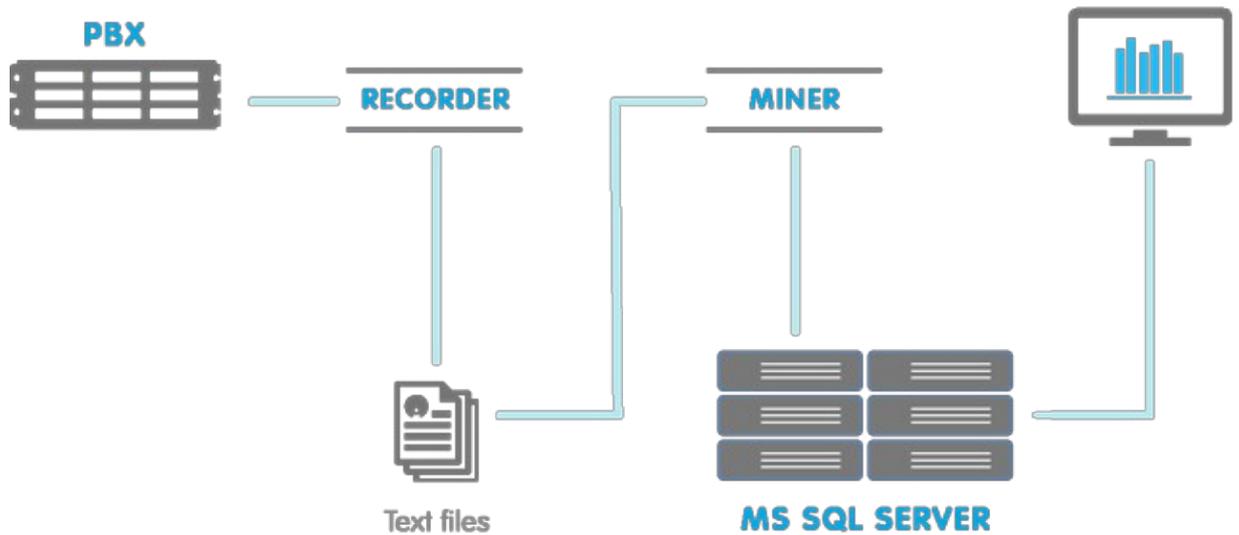
9. The CDRs are sent by the PBX to the Application Suite server through the specific connection type of the PBX and dropped in a folder by the (Recorder) stores them in files with a standard format. A second service (Miner) reads the files, calculates call costs and stores the result in the database. Once the calls are written into the database, reports can be directly generated or scheduled through the web interface.

10. Click to 'Service Manager' to Stop the 'Blues Service Host' which controls the others below services, Recorder, Miner and Scheduler.
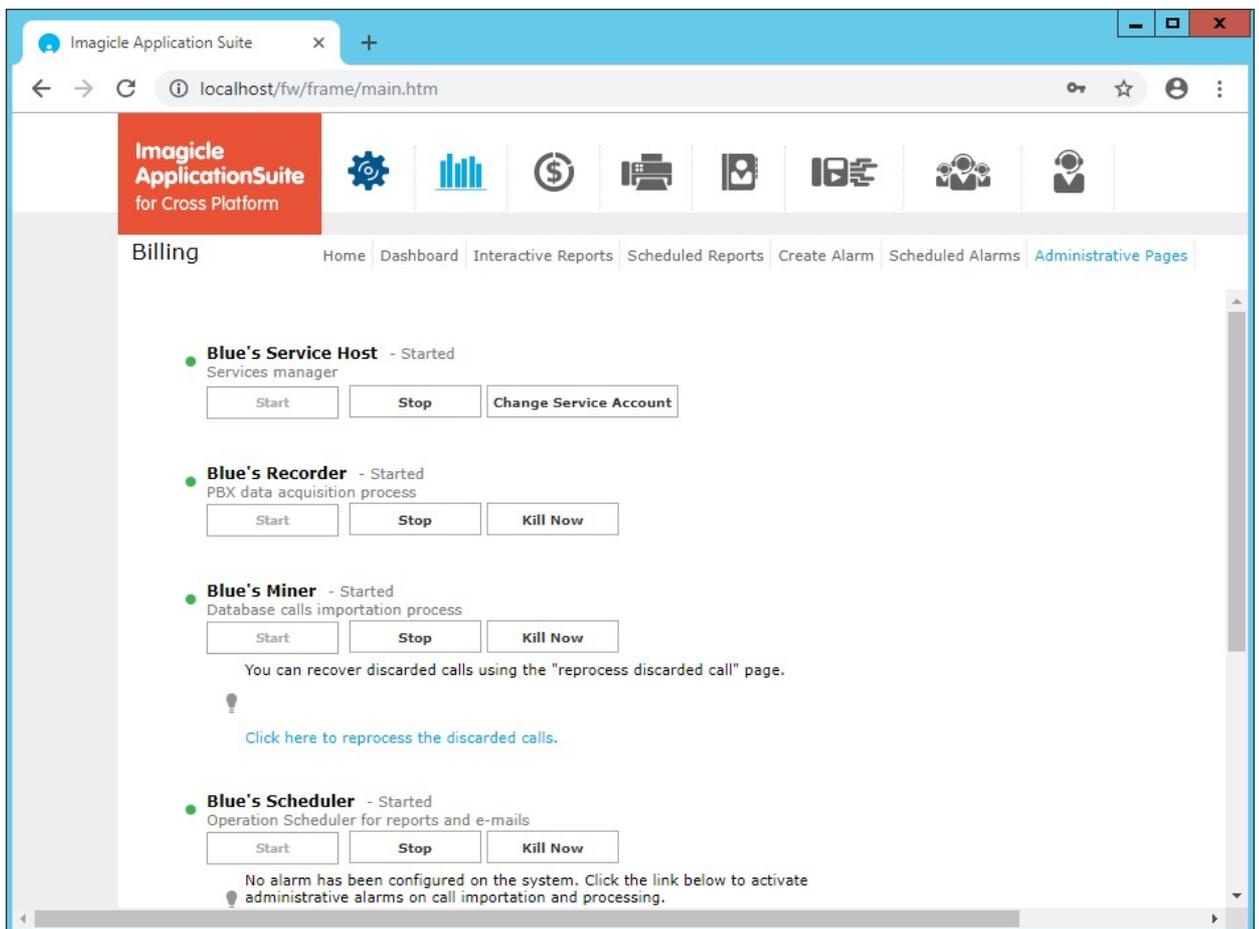
11. Click 'System Status' to have a panoramic view of the status of the proper operation and acquisition of calls from the different SITEs.

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Imagicle ApplicationSuite for Cross Platform	⚙	📊	⑤	🖨	📇	📇	👥	📋

Billing   Home Dashboard Interactive Reports Scheduled Reports Create Alarm Scheduled Alarms Administrative Pages

▶	Yes	Pbx1(SITE) Wildix		Show File

● **Blue's Miner** ›

  ● **Call importation service status**
    ▶ Started

  ● **License Info**
    Licence status: Evaluation version. Configurable extensions: 250. Expire on 2018-11-04.

Error and warning messages
⚠ Licence has not been registered and it will expire in 31 days. (#2000)

  ● **Application Status**
    Disk total space: 80 GB,Disk free space: 57 GB Available memory: 1743Mb , CPU: 7.2 %
    SQL Server:Microsoft SQL Server 2017 (RTM) - 14.0.1000.169 (X64) Aug 22 2017 17:04:49 Copyright (C) 2017 Microsoft Corporation
    Express Edition (64-bit) on Windows Server 2012 R2 Standard Evaluation 6.3 (Build 9600:) (Hypervisor)
    DB size:119.50 MB,unallocated space:96.74 MB
    Web ver.:4.1.0.19
    Refresh

  ● **Configured Sites**
    # Configured PBX 1 # Extension Configured: 1 Available extensions 249

PBX NAME	PBX CODE	ENABLED	COUNTRY	LOCAL AREA	CALLS MADE TODAY	TOTAL CALLS	LAST IMPORTED CALL	DISCARDED CALLS ACTIONS	EXTENSIONS NOT DEFINED ACTIONS
Pbx1	SITE	True	France	Paris	0	0		3 **Show discarded calls**	2 **Show extensions not defined**

Error and warning messages
⚠ All calls on site Pbx1(SITE) have been discarded.The pabx acquisition driver could not be correct or the format of pabx exported data could have changed. Run the guided configuration and change the driver, (#5007)
⚠ No call has been imported on site Pbx1(SITE). (#4003)

  ● **Last Successfully Imported Calls**
    Top 10 20 50 100 200 Refresh
    No Data Found

● **Blue's Scheduler** ›

Troubleshooting: No calls or no recent calls displayed on reports

1. Check if you've added all users with your extension in the Admin > User Management Page.

Imagicle ApplicationSuite for Cross Platform	⚙	📊	⑤	🖨	📇	📇	👥	📋

Administration   User Management System Parameters License Support Monitoring Presence High Availability

Create new user »
Import users from CSV or TSV files »
Synchronize users with an external data source »
Users authentication settings »
Add or modify personal filters »

› Customize search criteria   [no filter defined] ▼   Load

USERNAME	FIRST NAME	LAST NAME	EMAIL	FIRST EXTENSION NUMBER	FAX NUMBER	DEPARTMENT	VIEW	MODIFY	PERMISSIONS	DELETE	ACCESSES
[100]	John	Smith		100		Sales	🗂	✏	🔑	🗑	0
[101]				101		Sales	🗂	✏	🔑	🗑	0
[102]				102		Administration	🗂	✏	🔑	🗑	0
[103]				103		Support	🗂	✏	🔑	🗑	0
[104]				104		Development	🗂	✏	🔑	🗑	0
[105]				105		Pre-Sales	🗂	✏	🔑	🗑	0
[106]				106		Marketing	🗂	✏	🔑	🗑	0
[107]				107		Sales	🗂	✏	🔑	🗑	0
[108]				108		Administration	🗂	✏	🔑	🗑	0
[109]				109		Support	🗂	✏	🔑	🗑	0
[110]				110		Development	🗂	✏	🔑	🗑	0

2. Check if the calls was discarded.
Click to Billing > Administrative Pages > System Status and click to 'Show discarded calls'for the SITE that does not matter calls.

Configured Sites
Configured Gateways 6 # Extension Configured: 125 Available extensions 125

GATEWAY NAME	GATEWAY CODE	ENABLED	COUNTRY	LOCAL AREA	CALLS MADE TODAY	TOTAL CALLS	LAST IMPORTED CALL	DISCARDED CALLS	ACTIONS	EXTENSIONS NOT DEFINED	ACTIONS
Dubai	G004	True	United Arab Emirates	Dubai	0	28,141	11/1/2018 5:25:20 PM	2,832	Show discarded calls	509	Show extensions not defined
Internal calls	SITE	True			18	395,256	11/2/2018 1:14:05 PM	99,999	Show discarded calls	416	Show extensions not defined
Milano	G000	True	Italy	Milano	2	38,492	11/2/2018 12:07:29 PM	872	Show discarded calls	107	Show extensions not defined
SRST Milano	SIT6	False			0	0		490	Show discarded calls	0	Show extensions not defined
USA (Nexmo)	G005	True	United States	Florida	0	2,826	11/1/2018 1:15:21 PM	171	Show discarded calls	67	Show extensions not defined
Viareggio	G001	True	Italy	Viareggio	38	298,688	11/2/2018 12:41:09 PM	5,092	Show discarded calls	352	Show extensions not defined

3. If the description Error is:
   - Extension not configured, the user that made this call is not in the user list and must be added to be able to import its calls.
   - Cannot recognise call type, the driver is not correct for that CDR format or that string does not contain a valid import call.

Discarded Calls

Top 10 20 50 100 200 Refresh

DATE	TIME	DESCRIPTION	SITE	ERROR DATA
9/13/2018	2:15:09 PM	Extension not configured.	G001 -3	SITE 20180913 141458 192.168.4.4 OT 333068 192.168.100.130 192.168.
9/13/2018	9:39:39 PM	Extension not configured.	G001 -3	SITE 20180913 213900 192.168.4.4 O 333188 192.168.100.81 192.168.4.
2/17/2015	10:30:32 AM	Extension not configured.	G001 -3	SITE 20150217 103002 192.168.4.4 IT 11822 192.168.4.4 10.10.10.12 04
7/13/2015	4:14:03 PM	Cannot recognise call type	G001 -1	SITE 20150713 161329 192.168.4.4 I 46843 192.168.4.4 192.168.4.150
2/9/2016	6:02:03 PM	Extension not configured.	G001 -3	SITE 20160209 180127 192.168.4.4 IT 98784 192.168.4.4 192.168.4.35 0

4. Click to 'Show extensions not defined' to view the list of extensions that have made calls but are not declared in the User List.

Extensions not defined

Top 10 20 50 100 200 Refresh

101	6
222	5
223	5

5. You can add them from the Admin> User Management page to the limit allowed by the license and Reprocess Discarded Calls from the Billing > Administrative Pages, to import those calls

Billing   Home   Dashboard   Interactive Reports   Scheduled Reports   Create Alarm   Scheduled Alarms   Administrative Pages

Service manager   System status   Reprocess discarded calls   Recalculate Calls

Sql Panel   Manage Reports   Log configuration

Billing   Home   Dashboard   Interactive Reports   Scheduled Reports   Create Alarm   Scheduled Alarms   Administrative Pages

Start Date	2018-10-05
End Date	2018-10-05
Select a site:	Pbx1 (SITE) ▼ The current selection will process 202 discarded calls.

Reprocess

Current status: Reprocess is Stopped

6. If in the System Status no call was imported for the SITE you can check if the Recorder have imported the CDRs of the PBX configured.

● **Configured Sites**

Configured PBX 1 # Extension Configured: 1 Available extensions 9999

PBX NAME	PBX CODE	ENABLED	COUNTRY	LOCAL AREA	CALLS MADE TODAY	TOTAL CALLS	LAST IMPORTED CALL	DISCARDED CALLS	ACTIONS	EXTENSIONS NOT DEFINED	ACTIONS
Pbx1	SITE	True	Italy	Milano	0	0		0	Show discarded calls	0	Show extensions not defined

Error and warning messages

⚠ No call has been imported on site Pbx1(SITE). (#4003)

7. Click on 'Show File' in the Blue's Recorder section.

Billing   Home   Dashboard   Interactive Reports   Scheduled Reports   Create Alarm   Scheduled Alarms   Administrative Pages

● **Blue's Recorder** ›

   ● **PABX Info**

STATUS	ENABLED	SITE NAME	TYPE	LAST MESSAGE	ACTIONS
▶	Yes	Centralino1(SITE)	Wildix		Show File

8. A new box show you the calls imported from the Recorder in to the SotricoSITx.txt file.

storicoSITE.txt

```
3398  0 16Y4 0        0000 0  0  0 0  0222 0  0183  553396N99999  034631406060

SITE 20181102 210912 $ 1612 0  0173      71152          3346262491              232170423194334
00000100   000000000183   0.00FFFFF 0  0183  553406  0 16Y2 0        0000 0  0  0 0  0201 0
0183  553405N99999        71150

SITE 20181102 210912 $ 1689 0  0163      61672          9955              471170423194406
000001    100000000183   0.00FFFFF 0  0183  553413  0 16Y4 0        0000 0  0  0 0  0222 0  0183
553411N99999  034631406060

SITE 20181102 210912 $ 5658 0  0173      73252          7326              6170423194444 000000
300000000183   0.00FFFFF 0  0183  553428  0  0Y2 0        0000 0  0  0 0  0173 0  0183
553426N99999        73250

SITE 20181102 210912 $ 3473 0  0192      92592          7325              136170423194444
000000    300000000183   0.00FFFFF 0  0183  553427  0  0Y2 0        0000 0  0  0 0  0173 0  0183
553426N99999        92590

SITE 20181102 210913 $ 1689 0  0163      61672          9955              298170423194451
000001    100000000183   0.00FFFFF 0  0183  553425  0 16Y4 0        0000 0  0  0 0  0222 0  0183
553423N99999  034631406060
```
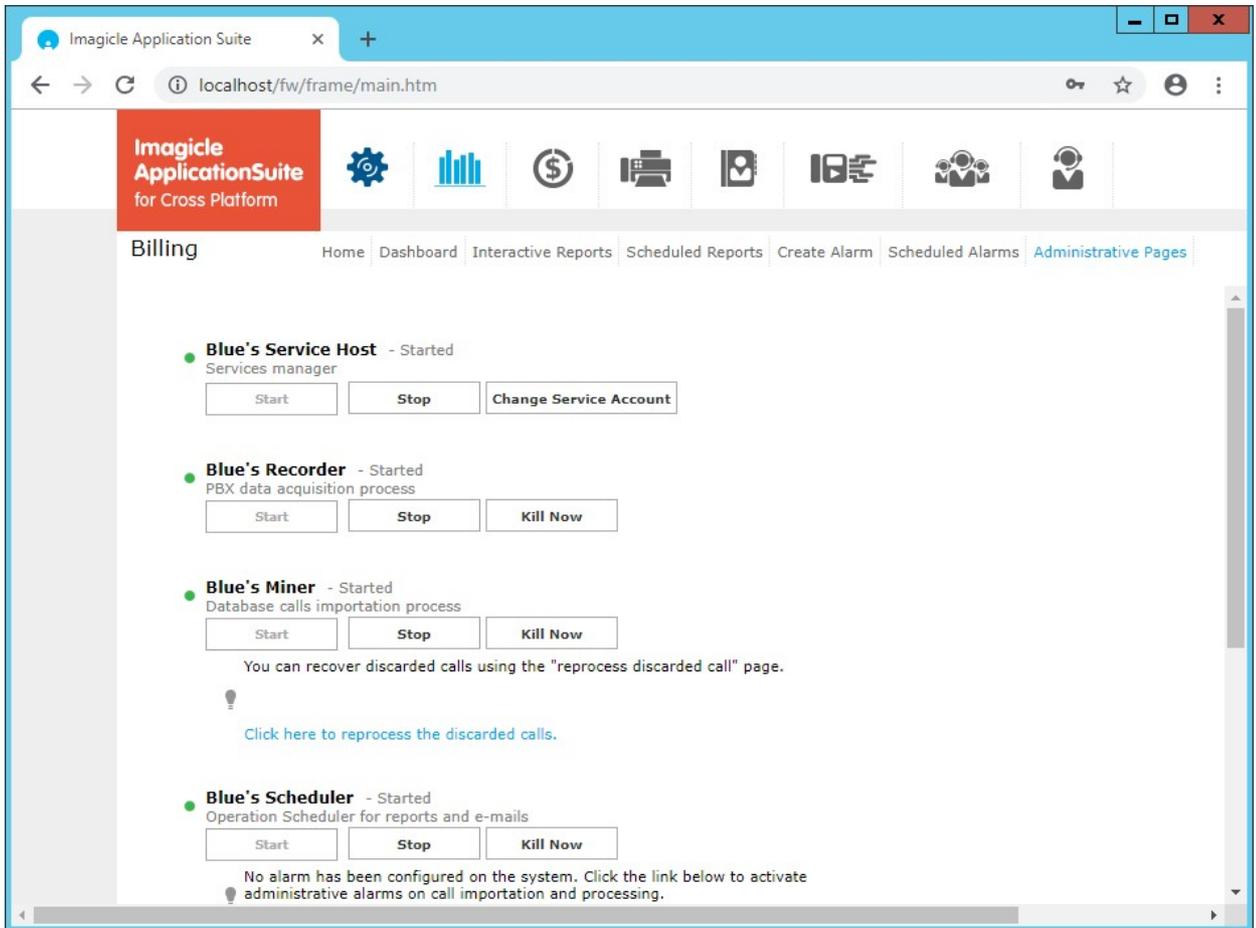
If no calls are displaying on this popup you can make the advanced troubleshooting.

Advanced troubleshooting

1. Click to 'Billing' > Administrative Pages > Service Manager and Stop the 'Blues Service Host' which controls the others below services, Recorder, Miner and Scheduler.

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2. Start Miner and Recorder manually by running these files with a double click:
   <StonevoiceAS>\Apps\BillyBlues\Engine\Bminer.exe
   <StonevoiceAS>\Apps\BillyBlues\Engine\BluesrecPro\BrecPro.exe
3. Check if the Recorder import the new CDRs
   and the Miner import the new calls.
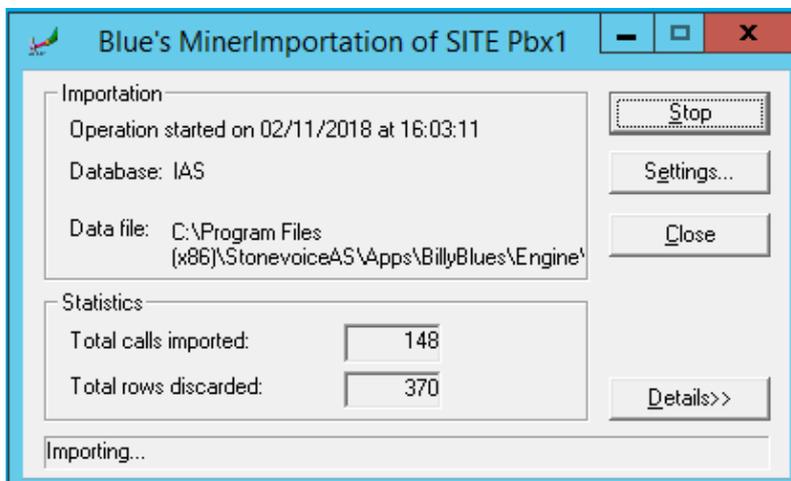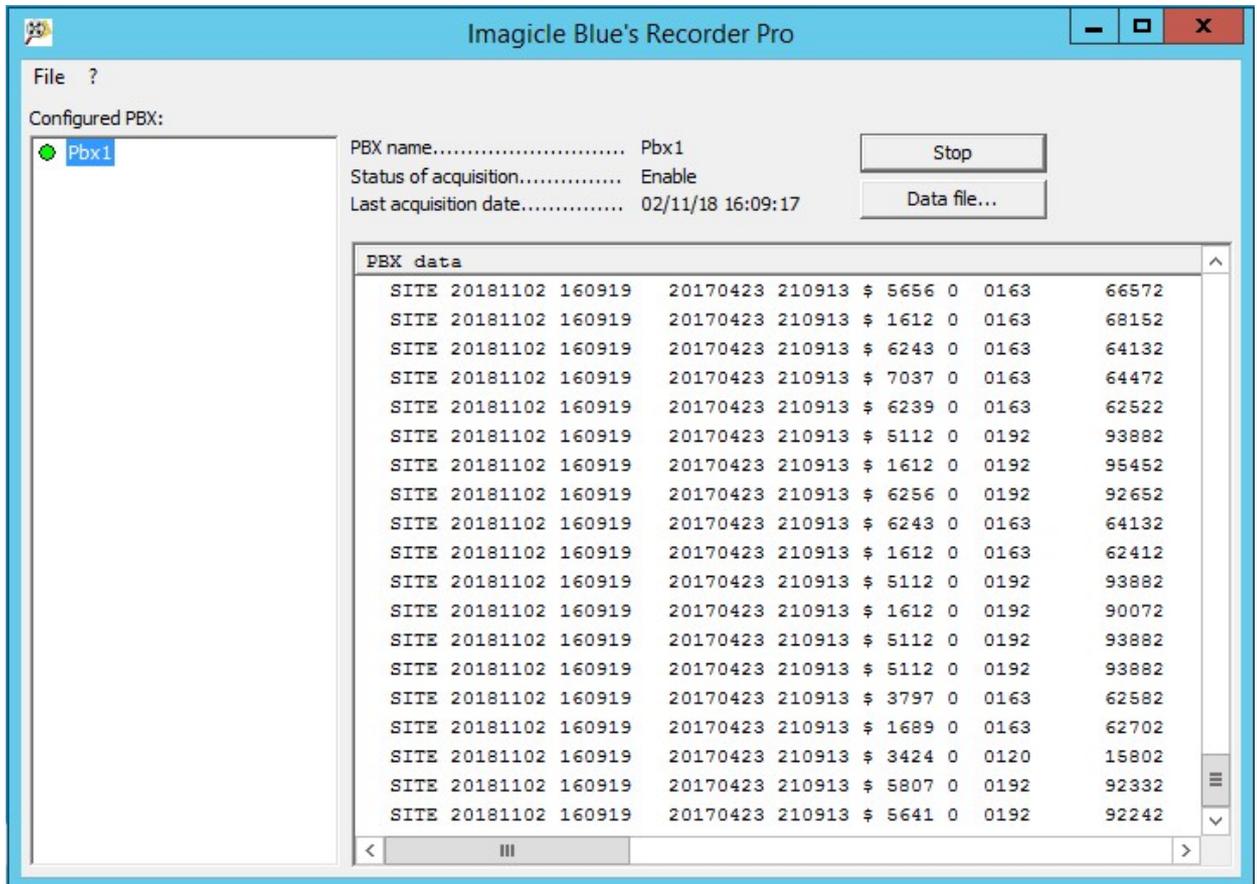
4. If you do not see recent calls in the Blue's Recorder, try to check the PBX connection parameters.
   Verify that the Firewall or Antivirus allow to receive CDRs from the PBX.

If the Miner discard all rows, try to select another available driver for your PBX from the 'Imagicle Configure Blue's Enterprise 4' > Site Setup.

If you don't solve with these information open support case here:
https://www.imagicle.com/en-us/contacts?NEEDSUPPORT=1&PAGEFROM=HELP
and provide us the follows information:

1. Open folder C:\Program Files (x86)\StonevoiceAS\Apps\BillyBlues\Engine
2. Double click BluesInfo.exe
3. Click [Next >] and follow on screen directions

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4. Click [Save to disk] then save binfo.cab on the desktop
5. Open folder C:\Program Files\StonevoiceAS\Apps\BillyBlues\Engine\BluesrecPro\
6. Open file Storicosite.txt
7. Highlight the last bottom rows (containing today's and yesterday's call details)
8. Right click -> Copy and paste highlighted rows into a new txt file, then save it
9. Open Imagicle App Suite > Admin > Users management
10. Click [Export as CSV] > Save As Users.csv
11. Attach the following files to the support case opening page: **Binfo.cab**, **Storico.txt** file and **users.csv**