

# Welcome to ScopServ

## ScopTEL – ACD Module



## Table of contents

1.	Introduction.....	2
2.	ACD manager.....	3
2.1.	Queues .....	3
2.1.1.	General parameters.....	3
2.1.2.	Managing notifications (queue).....	3
2.1.3.	Managing members.....	4
2.1.4.	Managing overflow .....	4
2.1.5.	Queue options .....	5
2.1.6.	Agent options.....	6
2.1.7.	Security .....	7
2.2.	Agents.....	8
2.2.1.	General parameters.....	8
2.2.2.	Options .....	8
2.2.3.	Caller ID .....	8
2.2.4.	Web authentication .....	8
2.2.5.	ScopSTATS.....	10
2.3.	Agent groups.....	11
2.4.	Routing by skills.....	11
2.4.1.	Setting the parameters for skills .....	11
2.4.2.	Setting the parameters for skill rules .....	12
2.4.3.	Assignment of skills to agents and rules to queue .....	12
2.5.	Call Tagging/Wrapup codes and Pause/Tag Codes.....	13
3.	ScopSTATS .....	14
3.1.	Real-time monitoring of the ACD .....	15
3.2.	Reports .....	19
4.	Other features.....	24
4.1.	Routing by caller number .....	24
4.2.	Handling of VIP calls / Routing to privileged agents .....	25
4.3.	Remote agents .....	26

# 1. Introduction

ScopTEL is an IP PBX management system based on Asterisk open-source technology. In addition to the many telephone features proposed by ScopTEL, this document highlights the ACD (Automatic Call Distribution, or call center) module in order to describe all of the features and possibilities.

## 2. ACD manager

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### 2.1. Queues

The Queues and Agents manager serves to manage an unlimited number of queues without any software restrictions.

Each queue includes the following services and settings:

#### 2.1.1. General parameters

- Tenant: Each queue must be assigned to a tenant since ScopTEL allows multi-pbx telephony management on a single server.
- Name: A queue is identified by a unique name (alphanumeric).
- Description: Serves to provide a functional description for a queue, for example.

#### 2.1.2. Managing notifications (queue)

- Outgoing message: This is the message that will be played to the caller (commonly called the "greeting message"). This message is played before the caller is placed in the queue. This message may be a single message or include a succession of sound files.
- Notification to the agent: When an agent is assigned a call from a given queue, a musical or vocal prompt may be played just before the call is connected. This is particularly interesting for agents who handle calls from several queues.
- Activate recurring notification: During the caller's wait period, a voice notification may be played, either in a recurring manner or not (frequency can be configured in seconds). This is used, for example, to inform callers that they can press a key (to be defined) at any time to leave a message.
- Notify the caller's position in the queue: Also during the wait period, the ACD can, if this option is selected, inform the caller of his position in the queue. The frequency at which this message is played can also be configured in seconds. Moreover, the ACD can also indicate, at another frequency (also configured in seconds) the estimated wait time. This wait time is based on an internal algorithm.

### 2.1.3. Managing members

- Ring strategy (distribution): Five call distribution strategies are available:
  - General ring
  - Round Robin
  - Least recent: the call is assigned to the agent who has received an incoming call least recently relative to the other agents concerned
  - Fewest calls: since the server constantly memorizes the call history for the current session, it will distribute the call to the agent who has handled the fewest number of calls during the same session
  - Random distribution
- Agents: This is where the agents who are authorized to take calls from the queue are defined. They are assigned by level of priority (five possible levels of agent priority per queue).

### 2.1.4. Managing overflow

The overflow can be used to configure the action(s) the ACD must perform in the event that calls in the queue are not answered.

- Fallback destination No. 1: By default, a fallback destination can be assigned to calls that cannot be distributed. The following destinations are possible:
  - Application
  - IVR (Interactive Voice Response)
  - Busy signal
  - Personalized script
  - Extension(s) (return to the greeting message, for example)
  - Direct call to a specific agent
  - Call Parking with notification
  - Play sound recording
  - Previous destination (if the call has gone through a succession of overflows)
  - Next destination
  - Queue (principal of mutual assistance)
  - Voicemail
  - Hang up with indication of cause
- Customized overflow management:  
This function is used to manage variable overflow destinations based on the cause of the overflow. There are four possibilities:
  - Overflow destination for maximum wait time reached
  - Overflow destination for maximum number of calls allowed in the queue

- Overflow destination for no agent logged in
- Overflow destination for no agent available (all busy or paused)

The possible types of destination are the same as above.

### 2.1.5. Queue options

- Queue ID: Unique ID
- Queue congestion: Parameter which, in a context of multi-queue agents, is weighted to give one queue priority over another.
- Language: Since ScopServ can manage several languages simultaneously, choosing the language for a queue means that the vocal instructions can be given in the language selected. (By default, three languages are provided: French, English and Spanish. Other languages can be installed.)
- Service level: Number of seconds that defines the service threshold. All calls answered under that threshold contribute to the success statistics.
- Hold music: In addition to the greeting message and possibly the queue status message, hold music can be played for the callers. The music is selected from a list that can be configured (the hold music can, under certain conditions, be a shoutcast type of audio stream. E.g.: Web Radio).
- Maximum number of calls in the queue: This parameter limits the number of callers in the queue. This is the value that will be used to trigger an eventual overflow action when it is exceeded.
- Maximum wait time in the queue: This value (in seconds) serves to define a caller's maximum wait time. An overflow destination can be configured for when this value is reached.
- Allow a call to be placed in a queue without an agent: A queue is considered to have no agent if all of the members logged in are paused or if no agent is connected. If this option is selected, the call will be placed in the queue anyway.

- Activate the ring rather than the hold music: Allows a ring to be played for the caller rather than the hold music.
- Selection of a single key: This option allows the caller, during the wait period, to press a key on their keypad and enter into an IVR that has been previously configured in ScopTEL. We strongly recommend that you combine this option with the “Activate recurring notification” option provided under “Managing notifications.”
- Try again after time out: In the event that the maximum time allowed is attained, it is possible to configure this option to allow one or more attempts to distribute the call. Both the number of attempts and the time between attempts can be configured.
- Place a prefix in front of the queue name: For agents who handle calls from several queues and have call display, it is possible to add a prefix to the caller’s number by means of a tab that will be displayed on the agent’s workstation when the call is received.
- Record call: This option is used to record the calls in the queue. By default, the “caller” and “agent” streams are recorded in two separate files. However, it is possible to use an associated option to have the call recorded in a single file.

#### 2.1.6. Agent options

- Indicate the call wait time to the agent: If this option is selected, when an agent takes a call from the queue, the ACD will let the agent know, vocally, how long the call has been on hold, allowing the agent to prepare for any comments the caller might make.
- Indicate the number of calls in the queue to the agent: In the interests of service quality, the ACD can let the agent know, when he takes a call from a given queue, how many calls are currently in that queue.
- Time (in seconds) before a new call is given to the agent: This parameter determines the rest time between two calls handled by an agent.
- Obligatory closing code (Qualification): In order to receive another call, the agent must enter a closing code at the end of each call handled.
- Pause/Expiration of the agent (seconds): This parameter defines the time allowed for presenting a call to an agent. Once this time has been exceeded, the call may once again be presented to the agents pool (this time can be configured) or parked.

- Wait time before another attempt (seconds): This parameter, when combined with the previous one, defines the amount of time that the ACD will place a call on hold before it is once again distributed to the agents who are logged in and ready.
- Parking of incoming calls: If this option is activated, agents will be able to position the call in "Call Parking," thereby reducing wait time in peak periods.
- Activate automatic logout: It is possible to impose an automatic logout on the agents, in two ways:
  - Specific date: The time of the daily logout will be entered
  - Duration of the login: Each agent will be logged out after a defined login period

#### 2.1.7. Security

- Security: It is possible to define a list of extensions from which an agent cannot login to the queue.



## 2.2. Agents

### 2.2.1. General parameters

- Tenant: Since SCOPSERV can potentially be used in multi-tenant mode, an agent must be assigned to a tenant.
- Extension (number or ID): This unique numerical ID (tenant-based) corresponds to the agent's login. This is the code the agent must enter when opening a session from their extension or the web interface.
- Password: Series of numbers that validates the agent's authentication.
- Full name: Series of letters and numbers serving to describe the agent in a more comprehensible manner.
- Description.

### 2.2.2. Options

- Maximum number of simultaneous calls: This obligatory parameter lets the ACD know the maximum number of calls the agent can handle simultaneously, all queues included.
- Skill groups: It is now possible to assign skills and skill levels to each agent so that calls can be routed by skill. This is described in more detail in chapter 2.4.
- Activate the recording of incoming calls: If this option is checked, the incoming calls for the agent in question will be recorded. It is possible to prefix the names of the recording files with a "tag."

### 2.2.3. Caller ID

- Name of the caller and Number of the caller (external): When an agent makes a call, it may be necessary to modify the outgoing identity (so that the name and the number of the direct line are not displayed). These options are used to modify the identity.

### 2.2.4. Web authentication

- Activate the user web interface: It is possible to activate the SCOPSERV web interface for each agent.

- User name and password: Once the agent web interface is activated, the authentication elements must be entered. They must be different from those used for the login (general parameters).

#### *Report permissions*

- Allow access to call reports (call logs): This permission allows the agent to access call reports that concern him, as well as those concerning other agents, which can be configured in a list. A complementary parameter will authorize access to the sound recordings of the agents included in the list.
- Allow access to ACD reports: This permission gives the agent access to statistics for one or more queues.
- Allow access to virtual fax reports: If one or more virtual faxes are associated with the agent pool, it may be necessary to give some of them access to the reports for those faxes.
- Activate ScopSTATS: Activating this option will give the agent access to the real-time ACD supervision monitor (see following section for more details).

### 2.2.5. ScopSTATS

The real-time ScopSTATS monitor provides numerous features in terms of both supervision and actions that can be configured. The ScopSTATS component of the Agent options provides for configuration.

The agent permissions parameters in the real-time interface concern:

- Access to the ScopSWITCH Virtual Phone: The Virtual Phone is a software and graphical interface used to control telephones. From this graphical interface, the user can:
  - Supervise the status of the extension's telephone lines (up to 26)
  - Change agent status:
    - Login/Logout
    - Select the queues in which he will intervene
    - Pause/Unpause
  - Control calls:
    - Pick up
    - Hang up
    - Transfer a call
    - Park a call
    - Send a call to a voice mailbox
    - Trigger the recording of a call in progress
- Access to the ScopSWITCH Panels: The "Panels" are real-time supervision panels that display the status of all the SCOPSERV server resources. These panels exist in private mode (specific to each agent) and public mode (available to all the users authorized to access the public panels).

These panels are an assemblage of various indicators, organized according to each user's needs.
- Access to real-time reports: The real-time reports are much more detailed indicators that provide a more in-depth analysis of the data hierarchy.

There are various types: voice channels, virtual conference rooms, workstations, agents, queues, voice mailboxes.
- Access to real-time controls: The controls serve to perform actions on the calls. Thus, an authorized individual can answer, hang up, transfer, park, record, and listen to calls from the ScopSTAT interface. He can also:
  - Login/logout and pause agents
  - Supervise and control voice mailboxes
  - Supervise and control virtual conference rooms

## 2.3. Agent groups

Agent groups are used to create objects that can be declared as members of a queue. The purpose of these groups is to quickly add several agents to one or more queues in case of a peak in activity.

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## 2.4. Routing by skills

Routing by skills is a distribution strategy used in call centres to assign an incoming call to the most appropriate agent for the request. This is an enhancement over existing distribution systems.

The best way to describe the principle of routing by skills is to provide an example.

Imagine a group of three agents, each with skills in specific fields.

- Agent 1 is an expert on Windows and speaks only French.
- Agent 2 is a Linux expert and speaks English and French.
- Agent 3 is a MacOS expert and speaks French and to a lesser extent English.

But each agent also has skills in “fields” other than their primary expertise.

Thus, it is possible to develop the following grid:

Agent	Windows	Linux	MacOS	French	English
Agent 1	100	50	25	100	0
Agent 2	25	100	50	100	100
Agent 3	50	25	100	100	50

Once this grid has been developed, it is possible to declare these elements in ScopTEL so that the calls are routed as desired.

### 2.4.1. Setting the parameters for skills

It is possible to define as many skills as desired. These skills are defined by a name and a description.

### 2.4.2. Setting the parameters for skill rules

A skill rule is a list of conditions (up to 10 conditions per rule).

A condition contains two parts:

- The first part is a dynamic test with two indicators:
  - the wait time for the call under consideration
  - the estimated wait time

Thus, for each condition in a skill rule, one of these two parameters may be compared to a configured threshold.

- The second part concerns the skills themselves. This part may include several skills, declared through the use of logical operators.

Thus, we can write: (***\$os > 30 & \$lang > 40***) | (***\$os > 50 & \$lang > 30***)

For example, we could establish a rule that would describe the following routing process:

- Initial routing conditions:
  - Level of the agents – “Windows” skill: 100
  - Level of the agents – “French” skill: 100.
- If the wait time for an incoming call **exceeds 30 seconds**, then I look for agents with a “Windows” skill level greater than or equal to 50 and I keep the “French” skill level at 100.
- If the wait time **exceeds 50 seconds**, I increase the possibility of finding an available agent by keeping the “Windows” skill level at greater than or equal to 50 and reducing the language skill level to greater than or equal to 50.
- Etc.

### 2.4.3. Assignment of skills to agents and rules to queue

Once the above parameters have been configured, all that is left to do is assign skill levels to each agent and assign the rules to the queues.

The ACD will distribute the calls in a completely dynamic manner, taking into account variations in call flow and ensuring that a maximum number of incoming calls are handled without a total loss of response quality.

## 2.5. Call Tagging/Wrapup codes and Pause/Tag Codes

ScopTEL allows you to create your own codes:

- Call Tagging for call categorization in reports,
- Agent Pause Tag Codes for Agent Pause categorization in reports.

The idea is to be able to compile statistics for the two types of codes.

### 3. ScopSTATS

ScopSTATS is the interface developed by ScopServ to ensure real-time monitoring of the IP PBX and, in particular, its ACD activity.

It is presented in the form of a light client GUI (web browser) using AJAX technology for browsing.

A veritable Windows-style desktop, the main interface is characterized by a “ScopSTATS” menu that provides access to a series of sub-menus. This means the user will be working in a familiar environment.

The screenshot displays the ScopSTATS web interface, which mimics a Windows desktop environment. At the top, there is a taskbar with icons for ScopSTATS, ScopSWITCH, Phone Extensions, and ACD Call Statistics. The main desktop area features several panels:

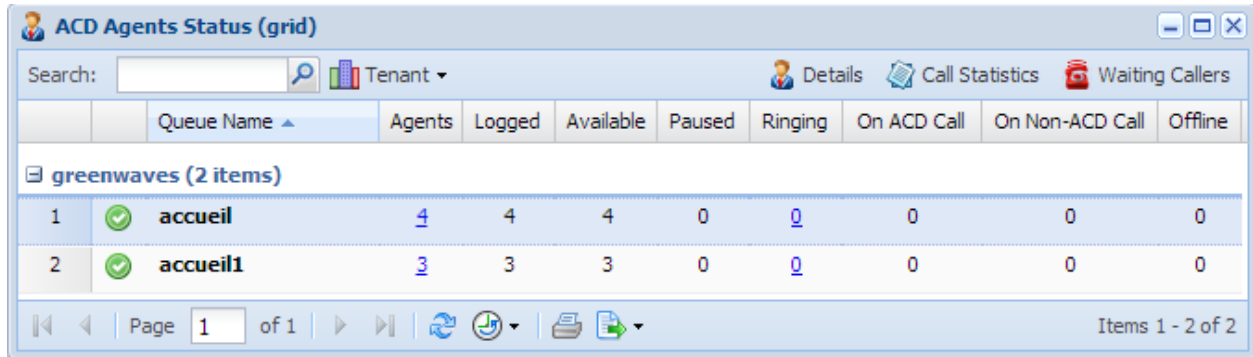
- Phone Extensions (grid):** A table listing 17 extensions with columns for Extension, Name, Status, Mailbox, DND, CF, Agent, HotDesk, Peer Type, Peer Status, IP Address, Port, Auto-Answer, User Agent, and Account Code. The table shows various agents with their current status (e.g., Unavailable, Available).
- ACD Call Statistics (grid):** A table showing call statistics for two agents, including columns for Queue Name, Agents, Logged, Available, Paused, Calls, Waiting, Current, Answered, Abandoned, Overflow, Avg. Wait Time, Total Talk Time, and Avg. Talk Time.
- ScopSWITCH Virtual Phone:** A panel on the right showing the status of a virtual phone (Agent 300) and active calls (Line #1 not available, Line #2 not available).
- Telephony Reports (logged as: admin):** A menu on the bottom right providing access to various reports and monitoring tools.

The menu includes the following items:

- System Activity Monitor
- Switch to System Monitoring
- ScopSWITCH™ Panels
- Live Monitoring
- Call Detail Record (CDR)
- Agent Call Distribution (ACD)
- Auto Attendant (IVR)
- Virtual Fax
- Emergency Lines (E911) Infos.
- Visual Call Flow
- Virtual Phone
- Personal Directory
- Scheduled Reports
- Display Options
- Logout

### 3.1. Real-time monitoring of the ACD

ScopSTATS offers call centre supervisors and agent's real-time graphic interfaces for monitoring the call panel activity.

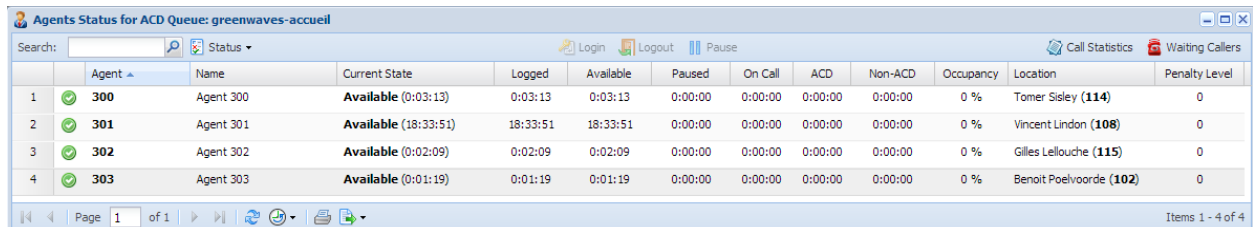


**ACD Agents Status (grid)**

Search:  Tenant Details Call Statistics Waiting Callers

	Queue Name	Agents	Logged	Available	Paused	Ringing	On ACD Call	On Non-ACD Call	Offline
<b>greenwaves (2 items)</b>									
1	accueil	4	4	4	0	0	0	0	0
2	accueil1	3	3	3	0	0	0	0	0

Page 1 of 1 Items 1 - 2 of 2

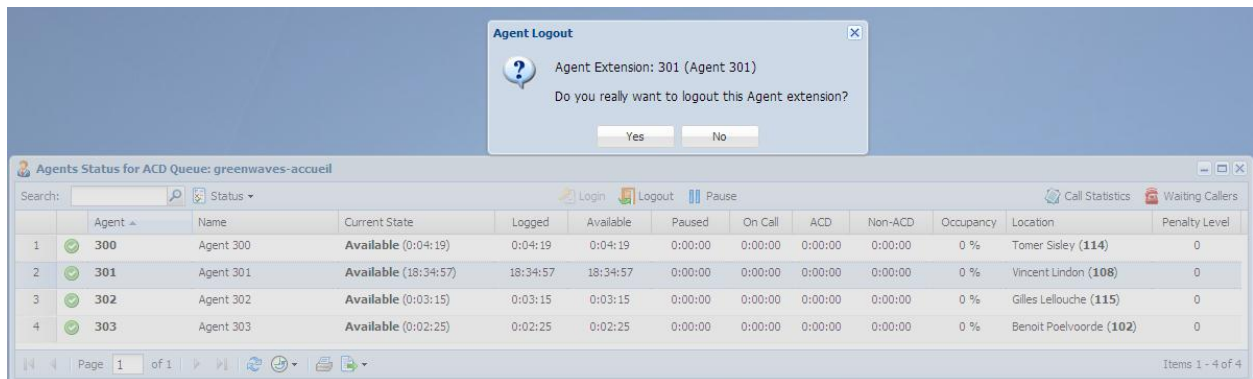


**Agents Status for ACD Queue: greenwaves-accueil**

Search:  Status Login Logout Pause Call Statistics Waiting Callers

Agent	Name	Current State	Logged	Available	Paused	On Call	ACD	Non-ACD	Occupancy	Location	Penalty Level
1	300 Agent 300	Available (0:03:13)	0:03:13	0:03:13	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Tomer Sisley ( <b>114</b> )	0
2	301 Agent 301	Available (18:33:51)	18:33:51	18:33:51	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Vincent Lindon ( <b>108</b> )	0
3	302 Agent 302	Available (0:02:09)	0:02:09	0:02:09	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Gilles Lellouche ( <b>115</b> )	0
4	303 Agent 303	Available (0:01:19)	0:01:19	0:01:19	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Benoit Poelvoorde ( <b>102</b> )	0

Page 1 of 1 Items 1 - 4 of 4



**Agent Logout**

Agent Extension: 301 (Agent 301)

Do you really want to logout this Agent extension?

Yes No

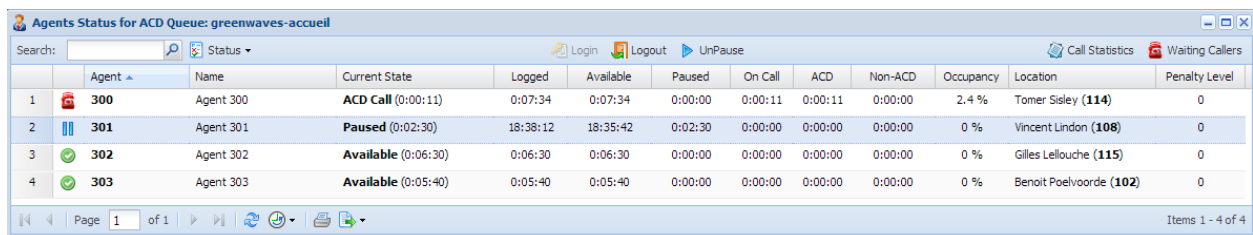
**Agents Status for ACD Queue: greenwaves-accueil**

Search:  Status Login Logout Pause Call Statistics Waiting Callers

Agent	Name	Current State	Logged	Available	Paused	On Call	ACD	Non-ACD	Occupancy	Location	Penalty Level
1	300 Agent 300	Available (0:04:19)	0:04:19	0:04:19	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Tomer Sisley ( <b>114</b> )	0
2	301 Agent 301	Available (18:34:57)	18:34:57	18:34:57	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Vincent Lindon ( <b>108</b> )	0
3	302 Agent 302	Available (0:03:15)	0:03:15	0:03:15	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Gilles Lellouche ( <b>115</b> )	0
4	303 Agent 303	Available (0:02:25)	0:02:25	0:02:25	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Benoit Poelvoorde ( <b>102</b> )	0

Page 1 of 1 Items 1 - 4 of 4

The supervisor can also use action buttons to act on the status of the agents supervised. In this way, the supervisor can force each of agent to **connect**, **disconnect** or **pause**.



**Agents Status for ACD Queue: greenwaves-accueil**

Search:  Status Login Logout UnPause Call Statistics Waiting Callers

Agent	Name	Current State	Logged	Available	Paused	On Call	ACD	Non-ACD	Occupancy	Location	Penalty Level
1	300 Agent 300	ACD Call (0:00:11)	0:07:34	0:07:34	0:00:00	0:00:11	0:00:11	0:00:00	2.4 %	Tomer Sisley ( <b>114</b> )	0
2	301 Agent 301	Paused (0:02:30)	18:38:12	18:35:42	0:02:30	0:00:00	0:00:00	0:00:00	0 %	Vincent Lindon ( <b>108</b> )	0
3	302 Agent 302	Available (0:06:30)	0:06:30	0:06:30	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Gilles Lellouche ( <b>115</b> )	0
4	303 Agent 303	Available (0:05:40)	0:05:40	0:05:40	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Benoit Poelvoorde ( <b>102</b> )	0

Page 1 of 1 Items 1 - 4 of 4



Agents Call Statistics for all ACD Queues

Search:  Status ▾

	Agent	Name	Current State	Talk Time	Answered Calls	Avg. ACD Talk	ACD Talk	Non-ACD Calls	Non-ACD Talk	Missed Calls	Missed Calls Time	Location
1	300	Agent 300	Available (0:07:08)	0:00:10	1	0:00:10	0:00:10	0	0:00:00	0	0:00:00	Tomer Sisley (114)
2	301	Agent 301	Available (0:05:47)	0:00:00	0	0:00:00	0:00:00	0	0:00:00	0	0:00:00	Vincent Lindon (108)
3	302	Agent 302	Paused (0:05:44)	0:00:00	0	0:00:00	0:00:00	0	0:00:00	0	0:00:00	Gilles Lellouche (115)
4	303	Agent 303	Ringing (0:13:04)	0:00:00	0	0:00:00	0:00:00	0	0:00:00	0	0:00:00	Benoit Poelvoorde (102)

Page 1 of 1

Items 1 - 4 of 4

The screen capture above highlights the action buttons that supervisors and, potentially, agents who are given the permissions can use to trigger the following actions for calls that are still in a queue:

Waiting Callers in all ACD Queues

ACD Queue ▾

Take the Call Hangup Transfer Park Record Spy

	Position	Caller ID	Wait Time	Recording	Initial Pos.
greenwaves-accueil (1 item)					
1	1	0777903918 (SC-Yann GLEVAREC-Code=1253...	0:00:04		1

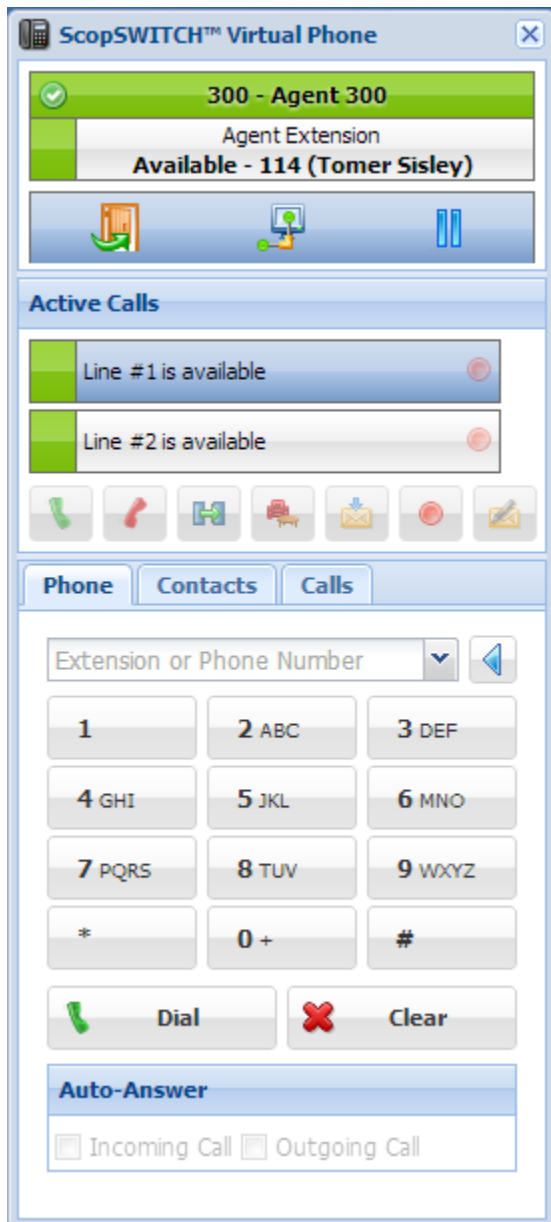
Page 1 of 1

Items 1 - 1 of 1

- Take the call,
- Hang up,
- Forward the call,
- Park the call,
- Record the call (if systematic recording has not been activated),
- Monitor the call (listen).

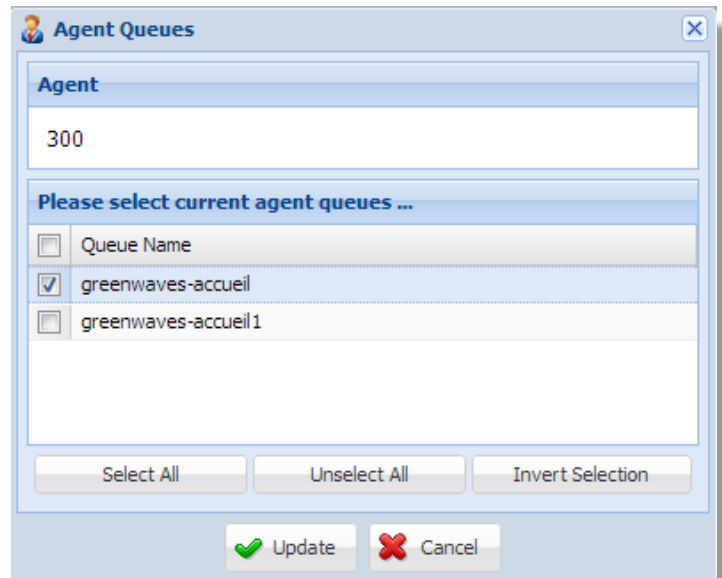
The possibility of taking calls from a queue without waiting for them to be distributed by the router is called “**pooling**”.

The ScopTEL ACD normally handles calls in an automated manner however Pooling allows a call to be plucked from the waiting calls list in order to provide VIP call handling.



The ScopSWITCH virtual telephone will be the agent's preferred tool, offering the following features:

- Login / Logout,
- Entry into / Withdrawal from one or more queues,
- Pick up / Hang up,
- Call forwarding,
- Pause / Unpause,
- Call logs,
- Contact list,
- Dialling from a virtual keypad,
- Listening to voicemail,
- Triggering a call recording.

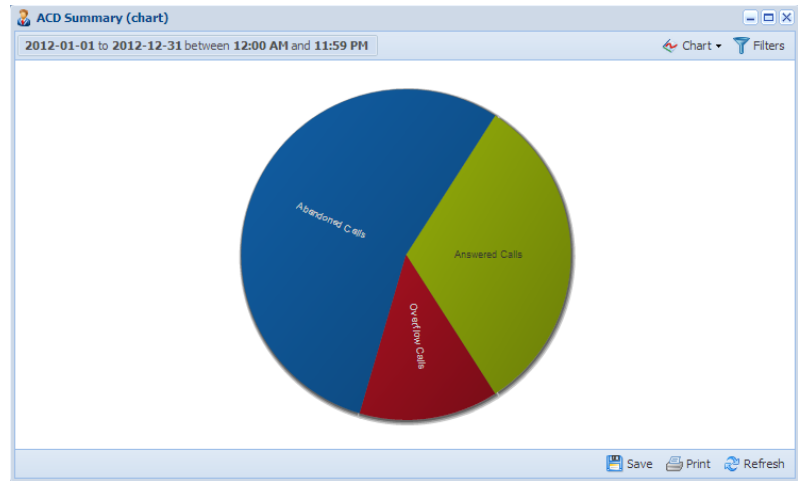


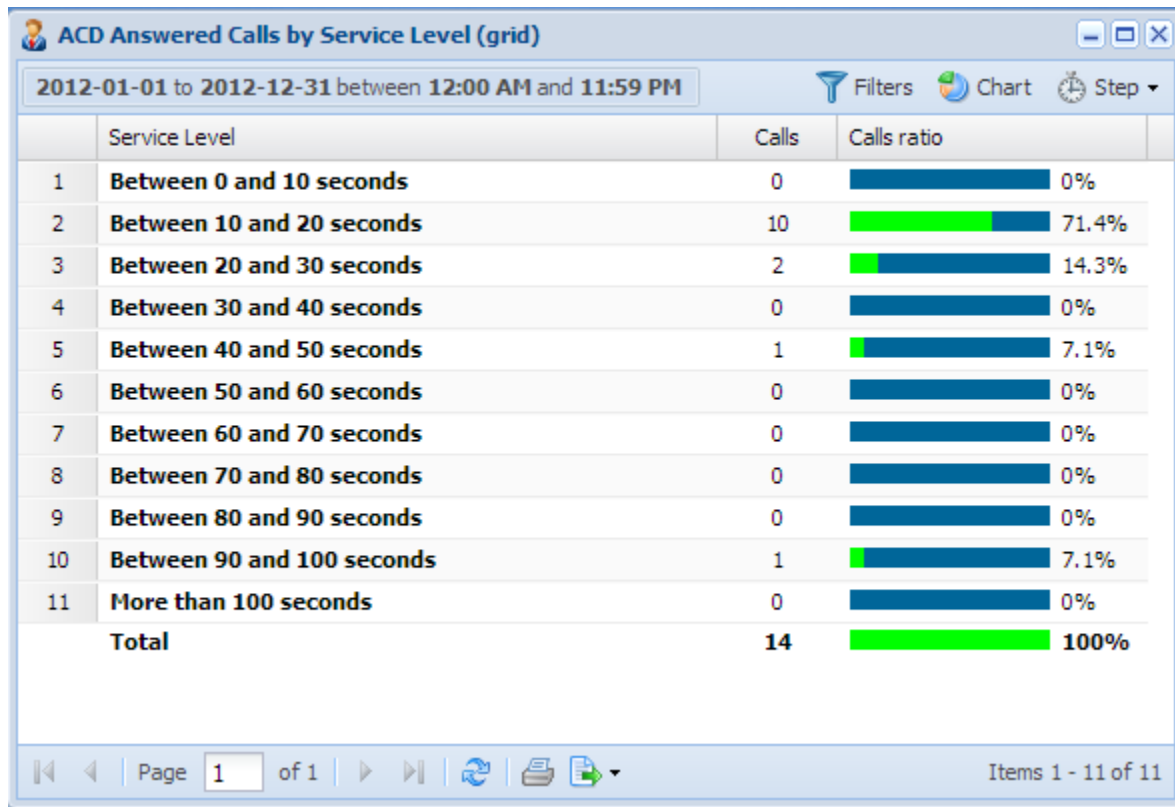
## 3.2. Reports

In addition to the real-time supervision tools, ScopTEL also includes a reporting engine that delivers an entire series of statistics on the use of the ACD and the queues.

Available in the form of data grids and multi-format graphs, each type of statistic can be exported to the following formats:

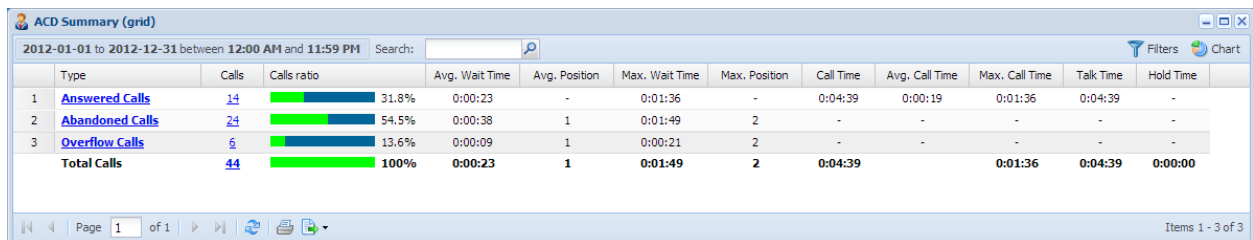
- HTML,
- PDF,
- Excel 2007,
- Excel 5/2003,
- CSV,
- Raw text.



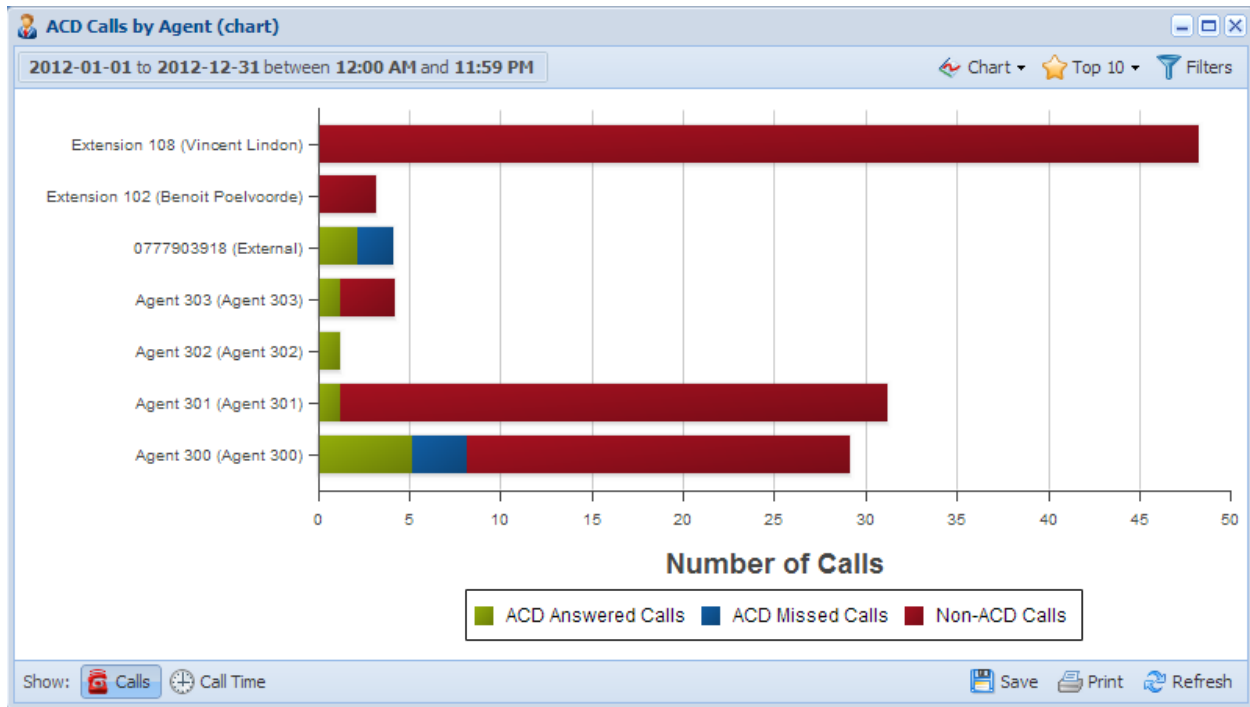


Data is extracted and analyzed from a dedicated “live/cradle to grave” database in which ScopTEL makes a real-time record of the telephone events in the queues. There is no lag when compared to competitive products which regularly use batches of data recopied between the live database and the statistics database.

Thus, it is possible to obtain immediate and up-to-date statistics about your agents’ performance, the queues and the quality of your customer service simply by refreshing windows.



## Welcome to ScopServ – ScopTEL – ACD Module



A1 : X ✓ fx ACD Calls by Agent (grid)

Agent	Calls	Call Time	Hold Time	Talk Time	Avg. Wait Time	Avg. Call Time	SLA	Missed Calls	Missed Time	Non-ACD Calls	Non-ACD Time	Wrapup Code
0777903918 (External)	2	00:00:21	00:00:00	00:00:21	00:00:28	00:00:10	50%	2	00:00:30	0	00:00:00	0
Agent 300 (Agent 300)	5	00:00:31	00:00:00	00:00:31	00:00:13	00:00:06	100%	3	00:01:00	21	01:00:17	0
Agent 301 (Agent 301)	1	00:00:03	00:00:00	00:00:03	00:00:15	00:00:03	100%	0	00:00:00	30	00:09:04	0
Agent 302 (Agent 302)	1	00:01:36	00:00:00	00:01:36	00:00:18	00:01:36	100%	0	00:00:00	0	00:00:00	0
Agent 303 (Agent 303)	1	00:00:30	00:00:00	00:00:30	00:00:17	00:00:30	100%	0	00:00:00	3	00:01:19	0
Extension 102 (Benoit Poelvoorde)	0	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	0%	0	00:00:00	3	00:00:31	0
Extension 108 (Vincent Lindon)	0	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	0%	0	00:00:00	48	01:08:50	0

This report has been generated using ScopSTATS, a product from ScopServ International Inc.

Report

ACD Calls by Agent (grid)

Report generated on 2013-02-15 08:11:43 with a total of 7 items

Date/Time: 2012-01-01 to 2012-12-31 between 12:00 AM and 11:59 PM

ACD Queues: greenwaves-accueil, greenwaves-accueil1

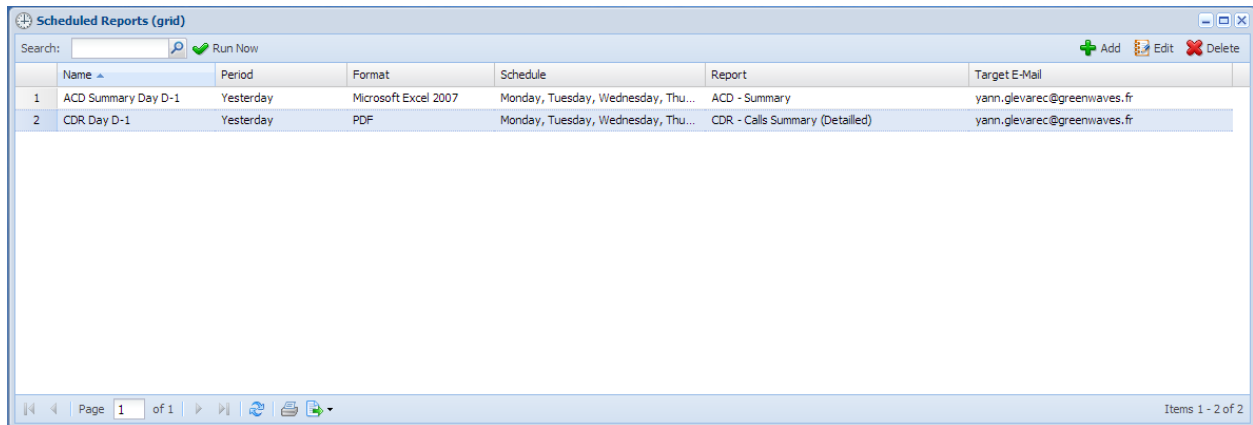
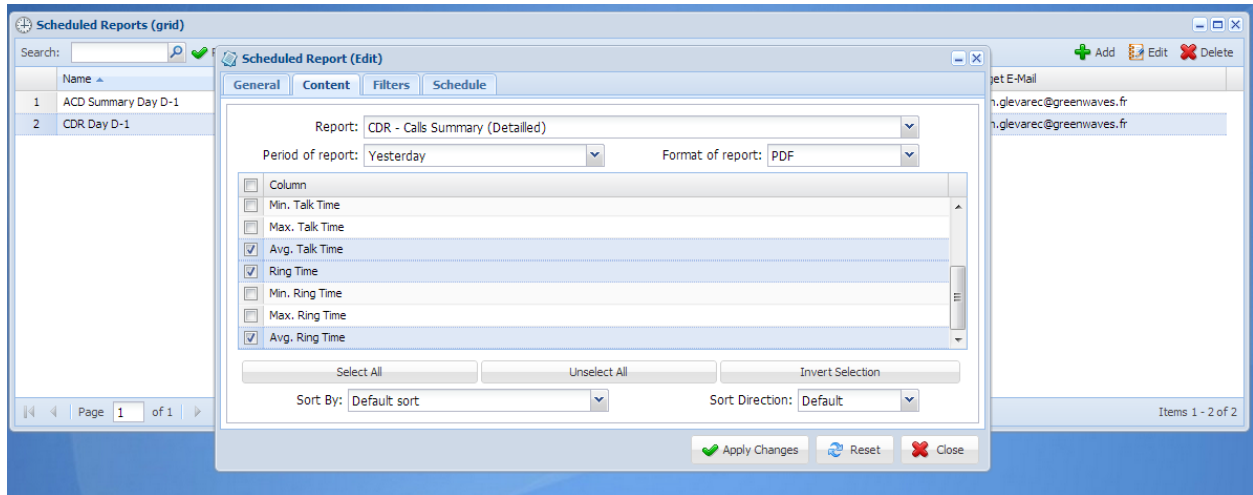
Agent	Calls	Call Time	Hold Time	Talk Time	Avg. Wait Time	Avg. Call Time	SLA	Missed Calls	Missed Time	Non-ACD Calls	Non-ACD Time
0777903918 (External)	2	00:00:21	00:00:00	00:00:21	00:00:28	00:00:10	50%	2	00:00:30	0	00:00:00
Agent 300 (Agent 300)	5	00:00:31	00:00:00	00:00:31	00:00:13	00:00:06	100%	3	00:01:00	21	01:00:17
Agent 301 (Agent 301)	1	00:00:03	00:00:00	00:00:03	00:00:15	00:00:03	100%	0	00:00:00	30	00:09:04
Agent 302 (Agent 302)	1	00:01:36	00:00:00	00:01:36	00:00:18	00:01:36	100%	0	00:00:00	0	00:00:00
Agent 303 (Agent 303)	1	00:00:30	00:00:00	00:00:30	00:00:17	00:00:30	100%	0	00:00:00	3	00:01:19
Extension 102 (Benoit Poelvoorde)	0	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	0%	0	00:00:00	3	00:00:31
Extension 108 (Vincent Lindon)	0	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	0%	0	00:00:00	48	01:08:50

This report has been generated using ScopSTATS, a product from ScopServ International Inc.

The following statistics are available:

- Agents
  - ACD calls
  - Non-ACD calls
  - Availability
  - Pauses and pause codes
  - Event report
- Calls answered
  - By queue
  - By agent
  - By disconnect cause
  - Service level
- Dropped calls
  - By queue
  - Service level
- Overflow calls
  - By queue
  - Causes for overflow
- Distribution of calls
  - By date
  - By time
  - By day of the week
  - By month
  - By month and year
  - By year
- Service level
  - By date
  - By time
  - By day of the week
  - By month
  - By month and year
  - By year
- Wrapup codes
  - Summarized by code
  - Codes per queue
  - Codes per agent
- Call report (detailed)

ScopSTATS can be used to program the automatic generation and transmission of customized reports.



The reports concern:

- Call logs
- ACD statistics

Dozens of settings can be customized for each of these reports, making the reporting task very accurate and precise.



## 4. Other features

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### 4.1. Routing by caller number

Upstream from the call distribution engine, ScopTEL can be used to route the incoming calls, based on the caller's number, ensuring a pre-qualification.

For a multi-lingual call centre (French/English), for example, the ScopTEL administrator will create a single queue, as well as a series of agents.

Two language skills will be created and assigned to the various agents, with the possibility of rating agent skill levels.

The administrator will then create two incoming lines for the same DNIS/DID.

- He will assign the following parameters to the first line:
  - Skill rule: language variable = "English"
  - Line language: "English" (so that ScopTEL uses the appropriate vocal guides)
  - Hold music: choice of English message
  - Routing by incoming Caller ID:
    - 1XXXXXXXXXX. Sample template for defining calls from the United States
    - 44X. Template for defining calls from the United Kingdom

It should be noted that the list of incoming Caller IDs is not limited and can be enhanced as desired.

- On the second line, he will only assign:
  - Skill rule: language variable = "French"
  - Hold music: choice of French message

The other parameters will take the default configuration (line language = language assigned to tenant = French in this example).

With the parameters set in this manner, ScopTEL will route the calls from the United States and the United Kingdom to the queue, after positioning the language parameters defined above, thereby enabling the ACD engine to distribute these calls to the appropriate agents, namely those with a skill in the "language = English" variable. The other calls will also be routed to this queue, but the language variables will be different and they will be distributed to another group of agents.

This configuration is provided as an example and does not represent an obligatory operating mode.

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## 4.2. Handling of VIP calls / Routing to privileged agents

The principal of the VIP call involves modifying the priority of a call in a queue if the number of that call is included in a list of so-called VIP callers.

This has been integrated in ScopTEL from the outset in a feature called "Caller ID Lookup." This feature works as follows:

When a call appears on an incoming line, ScopTEL sends a request to a data source, either internal or external to the server, to search for the caller number indicated in the parameter. If it is found, the following information will be provided:

- cidnum: caller's number, which can eventually be changed as needed,
- cidname: caller's name.

It should be noted that the "cidnum" and the "cidname" are displayed on the agent's workstation. It is therefore also possible to create the "cidname," for example, from scratch to include information other than the client's name (client code, for example).

- queueprio: caller's priority. This is the information that is transmitted to the queue so that the call is positioned correctly in the queue when it arrives. The higher the value is, the higher the call will be placed in the queue. Therefore, this is not a binary VIP management system (VIP or not VIP), but a graduated system that provides for precise management of the VIP priority level.
- agentid: ID of the agent who handles the calls from that caller on a priority basis.

It should be noted that a caller may be assigned to an agent while the agent is in contact with the caller, by entering a function code on the telephone keypad.

The following formats for external data sources can be queried for each incoming call:

- SQL table
  - MySQL
  - SQL Server (Microsoft)
  - Sybase
- Flat files,
- LDAP database.

ScopTEL is evolving quickly and the possibility of interacting with Web Services is being developed.

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### 4.3. Remote agents

In the ACD module, ScopTEL also offers the possibility of distributing calls to remote agents, who have no telephone resources specific to the business.

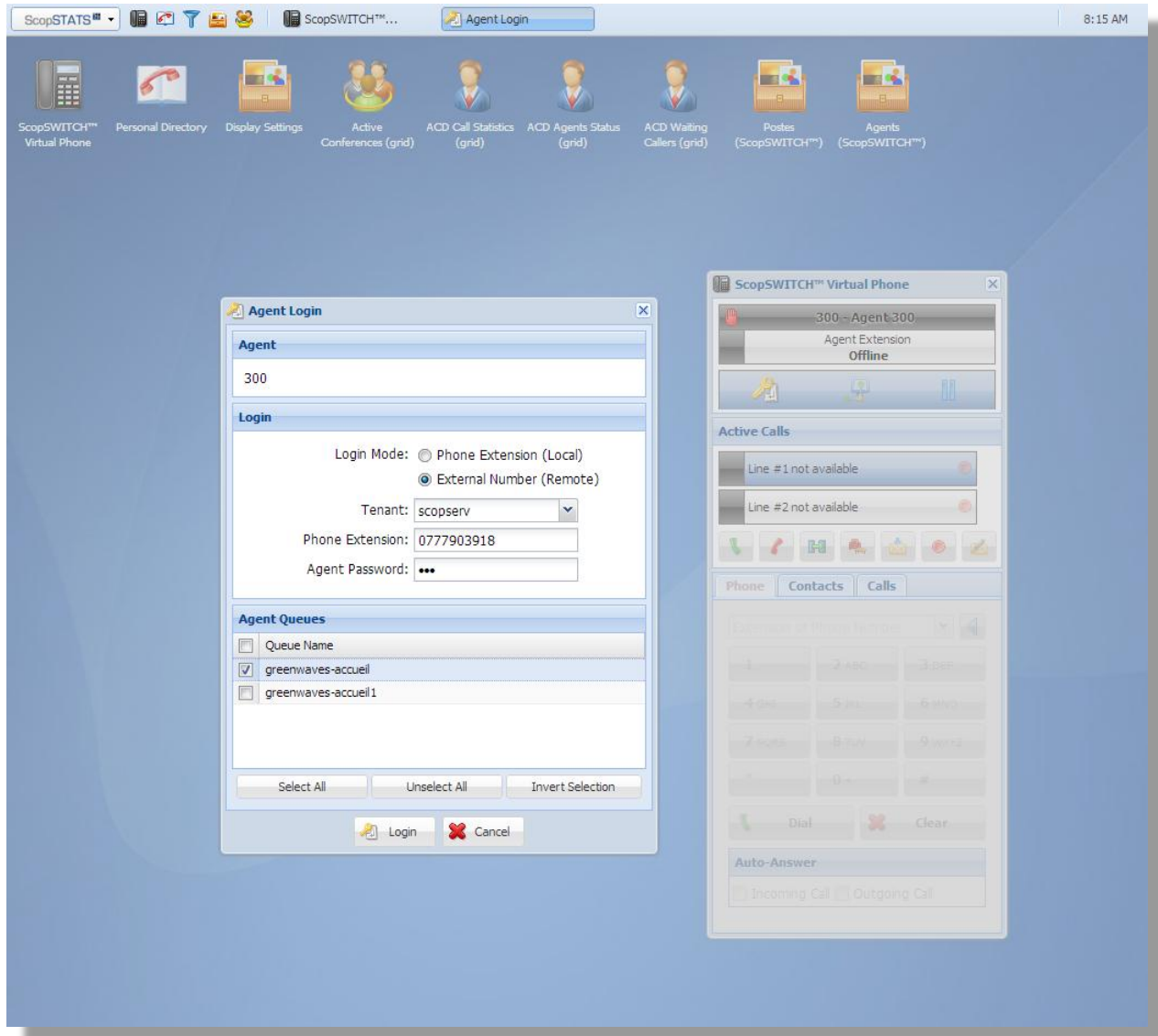
This functions as follows:

A remote agent, equipped with a home telephone or a cellular telephone, calls a number for the business, programmed in DISA (Direct Inward System Access) mode. Instead of entering a call number, the agent then dials the "Remote Agent Connect" code. And then enters into the same authentication process as a local agent (dials the agent code and then password). The agent is now ready to accept calls that ScopTEL will distribute through the external number (implicit or entered).

This feature is particularly interesting in the case of a pandemic or a BCP (Business Continuity Plan).

It should be noted that this mode can be used without the agent having to call the system's DISA number. If ScopSTATS is accessible to the agent remotely, all the agent has to do is connect through the web interface, authenticate their Agent ID with the correct information and make ready to take calls on an external number.

## Welcome to ScopServ – ScopTEL – ACD Module



In both situations, the agent is seen by the supervisor as connected from the outside.

Agent	Name	Current State	Logged	Available	Paused	On Call	ACD	Non-ACD	Occupancy	Location	Penalty Level
1	300	Agent 300	Available (0:00:22)	0:00:22	0:00:00	0:00:00	0:00:00	0:00:00	0 %	0777903918 (External Number)	0
2	301	Agent 301	Available (8:17:05)	8:17:05	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Vincent Lindon (108)	0
3	302	Agent 302	Available (0:29:52)	8:17:05	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Gilles Lellouche (115)	0
4	303	Agent 303	Available (8:17:05)	8:17:05	0:00:00	0:00:00	0:00:00	0:00:00	0 %	Benoit Poelvoorde (102)	0