

# **STONEVOICE**

## **SkyStoneACD v1.3**

### **System Guide**

**Stonevoice S.r.l.**

Via Piave, 46 - 20010 - Santo Stefano Ticino (MILAN), ITALY

**Tel.** (+39) 02-97482.200

**Fax** (+39) 02-97482.222

**E-Mail:** [info@stonevoice.com](mailto:info@stonevoice.com)

**Site:** <http://www.stonevoice.com>

## Table of contents

1.	<i>Introduction</i>	3
2.	<i>Requirements, Installation and First Run</i>	4
3.	<i>Multiple incoming Skype calls on the same Skype account</i>	7
4.	<i>Direct Inward Dial capabilities</i>	9
5.	<i>Redundancy and Scalability</i>	11
6.	<i>Configuration</i>	12
7.	<i>Manage SkyStoneACD</i>	16
8.	<i>Monitor</i>	16
9.	<i>Configure additional Dispatchers</i>	18
10.	<i>SkyStone configuration</i>	19
11.	<i>Contacts</i>	19

## 1. INTRODUCTION

SkyStoneACD is the SkyStone add-on software to allow:

- multiple incoming Skype calls to the same account (free line selection)
- incoming calls from Skype to the direct phone extension (DID)
- redundancy and scalability by sharing the load across SkyStone servers

SkyStoneACD is able to catch all incoming calls from Skype and dispatch to the first available channel across several SkyStone machines, adding redundancy and scalability as an EXCLUSIVE Stonevoice feature.

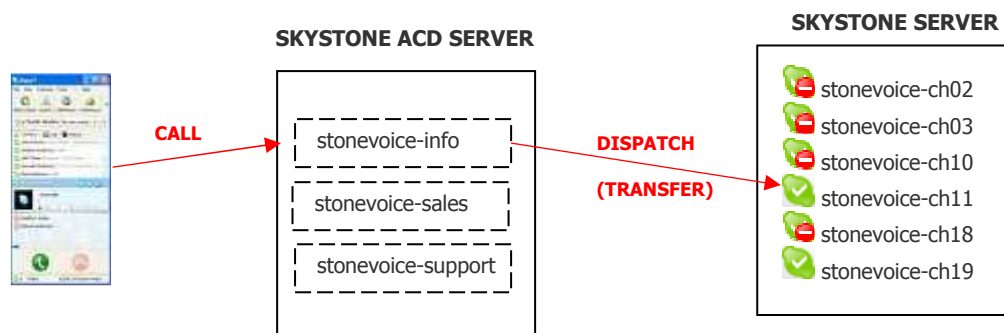
SkyStoneACD is intended for any company with one or more of these needs:

- multiple concurrent incoming calls to the same Skype account on SkyStone (company account, ex: stonevoice-sales);
- the skype-me button on each user's email signature (DID) to be directly called from skype on their desk phone;
- a lot of SkyStone channels and a reliable service with multiple hot standby machines

SkyStoneACD will catch the call and dispatch (transfer) to the first available SkyStone channel.

Features in a nutshell:

- Smooth integration with one or more SkyStone machines
- Software only: easy to install, configure and use – PLUG & PLAY
- Running on a Windows based platform (XP or 2003)
- Powerful: multiple dispatcher can run on the same box



## 2. REQUIREMENTS, INSTALLATION AND FIRST RUN

SkyStoneACD can be installed on the same machine of SkyStone or on a different machine.

SkyStoneACD v. 1.3.0.1 needs Skype version 3.5 installed on the same PC/Server.

Please switch off any firewall and any VPN client with stateful firewall installed on the SkyStoneACD machine.

Please download Skype here:

<http://downloads.stonevoice.com/downloads/special/Skype35Setup.exe>

### **Please install Skype before installing SkyStoneACD**

You need Internet Connectivity for SkyStone to properly login Skype clients.

### **Verify Skype Configuration before installing SkyStoneACD**

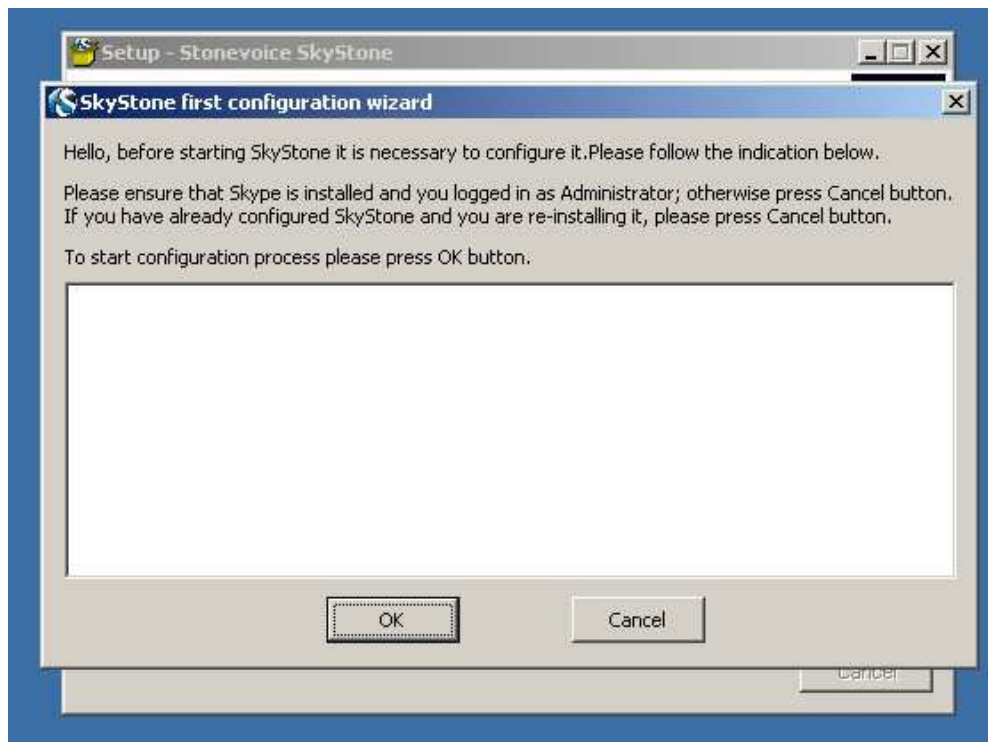
You need to unflag "Sign me in when Skype starts" and "Start Skype when the computer starts"



## Install SkyStoneACD by following the on screen instructions

At the end of installation, the First Run wizard will appear and drive you through the skype accounts configuration procedure.

Please click OK to start the Skype accounts configuration wizard.



If an "Error configuring Skype" message appears, please double check to have correctly installed Skype and select the installation path as requested.



SkyStoneACD supports multiple dispatchers (Skype accounts to be published): so the wizard will launch as many Skype clients as the license is allowing.

Click Next to start with the first dispatcher.

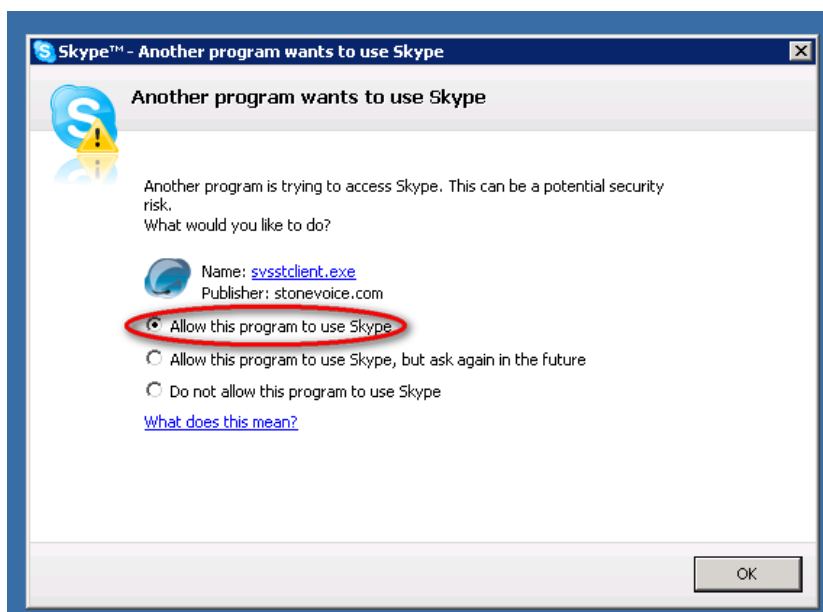
For each Skype client you need to enter the username and password for that dispatcher (ex: Sv.SkyStone).

You can either create the account at this stage or use already existing one.

Remember to flag "Sign me in when Skype starts" box.

When asked, allow "SvSsaClient.exe" application to have access to Skype.

Please wait until Skype logs in, then click Next to configure the next dispatcher.



Every time you need to change the skype accounts managed by the SkyStoneACD you need to run the First Run wizard again.

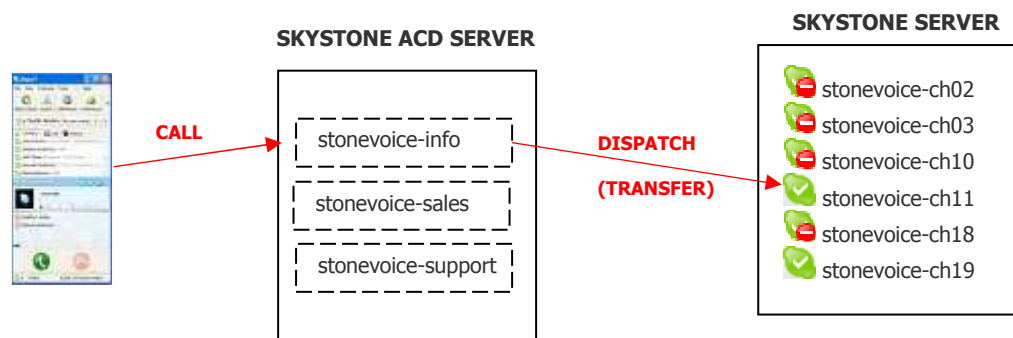
If you have applied a new license able to change the number of dispatchers available through SkyStoneACD, you need to run the First Run wizard again to configure the new dispatchers.

### 3. MULTIPLE INCOMING SKYPE CALLS ON THE SAME SKYPE ACCOUNT

SkyStoneACD allows receiving multiple incoming Skype calls to the same Skype account and then dispatch to the first available SkyStone channel.

If you have 2 channels, you have created/assigned during SkyStone configuration 2 different skype accounts, let's say yourcompany.001 and yourcompany.002.

People can call you on both, but if you want to publish just an account and receive multiple calls on it, the SkyStoneACD will catch the calls and dispatch (transfer) to the first available SkyStone channel.



As shown in the above image, it is possible to define multiple "Dispatcher" (ex: stonevoice-info, stonevoice-sales, stonevoice-support) to publish with the SkyStoneACD and these being redirected to the same or different SkyStone channels behind.

This way the SkyStone will handle unknown Skype accounts to physically connect the call to the SIP/H.323 PBX, while the SkyStoneACD will handle the Skype accounts to be officially reached by the Skype world.

So the logical structure could be something like:

'SkyStoneACD Public accounts':		'Internal' SkyStone channels:
sv.support	->	sv.support.001
		sv.support.002
		sv.support.003
		sv.support.004
sv.info	->	sv.info.001
		sv.info.002
		sv.info.003
		sv.info.004

or either a situation like the following one, if less SkyStone channels are available:

'SkyStoneACD Public accounts':

sv.support ->

'Internal' SkyStone channels:

sv.skystone.001

sv.skystone.002

sv.skystone.003

sv.skystone.004

sv.info - >

sv.skystone.001

sv.skystone.002

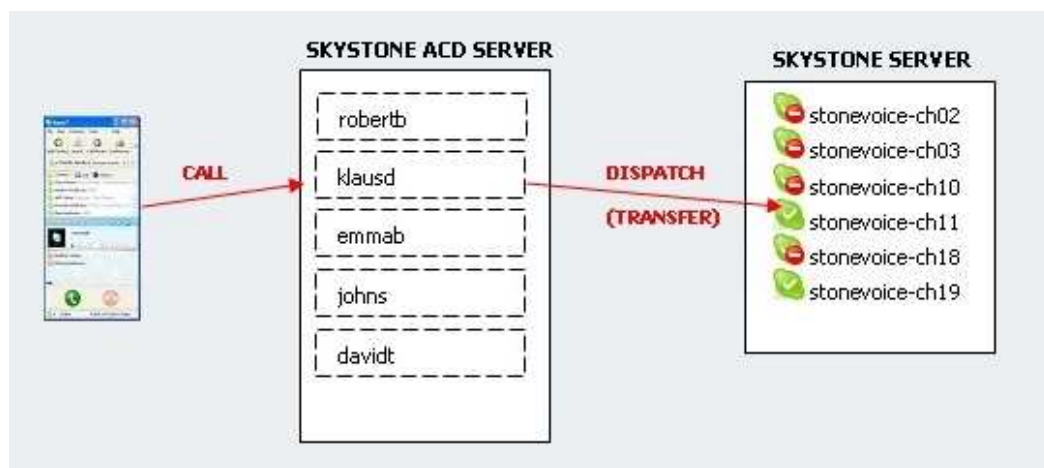
sv.skystone.003

sv.skystone.004

## 4. DIRECT INWARD DIAL CAPABILITIES

SkyStone provides an exclusive feature in combination with SkyStoneACD for each user to be called from skype directly on personal phone (DID, direct-inward-dial).

As SkyStone manages as many channels as the number of concurrent calls supported, it would not be possible to publish as many accounts as number of users to be directly reached from Skype (this is limited by the number of SkyStone channels). With SkyStoneACD you can separate the SkyStone channel from the Skype account to publish as per below figure:



SkyStoneACD is able to manage more accounts than SkyStone, as these are just DISPATCHER for calls to be transferred to the SkyStone channel account.

This way each user can put the skype call me button on his signature and being able to receive these calls directly on his phone.

This is a sample signature that all users in your company can now have, being able to receive the calls placed by clicking the "Call me" button directly on their phone:

---

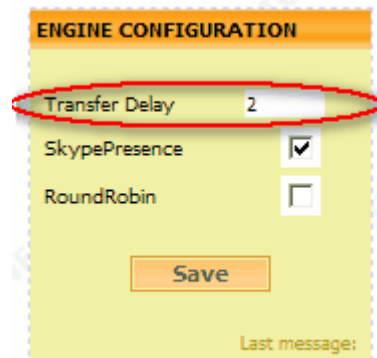
John Smith  
Regional Sales Manager - EMEA  
**ACME Inc.**



If you don't have Skype download it now and call us free of charge.  
*Would you like to use your desk phone to call Skype users ?*  
*Connect **SkyStone** to your PBX and improve your business!*

Each user can configure his skype account (ex: robertb) either on the SkyStoneACD machine as a dispatcher and keep using on his laptop or mobile phone.

As the SkyStoneACD will catch the call instantly to dispatch to the first SkyStone available channel, it is possible to configure the "Transfer Delay" parameter to wait for a certain number of seconds before dispatching the call. This way the user has the time to answer the call from his client ringing for the number of second configured before being caught by SkyStoneACD. To configure the "Transfer Delay" go to "Configure" menu and change the value of "Transfer Delay" parameter as follow:



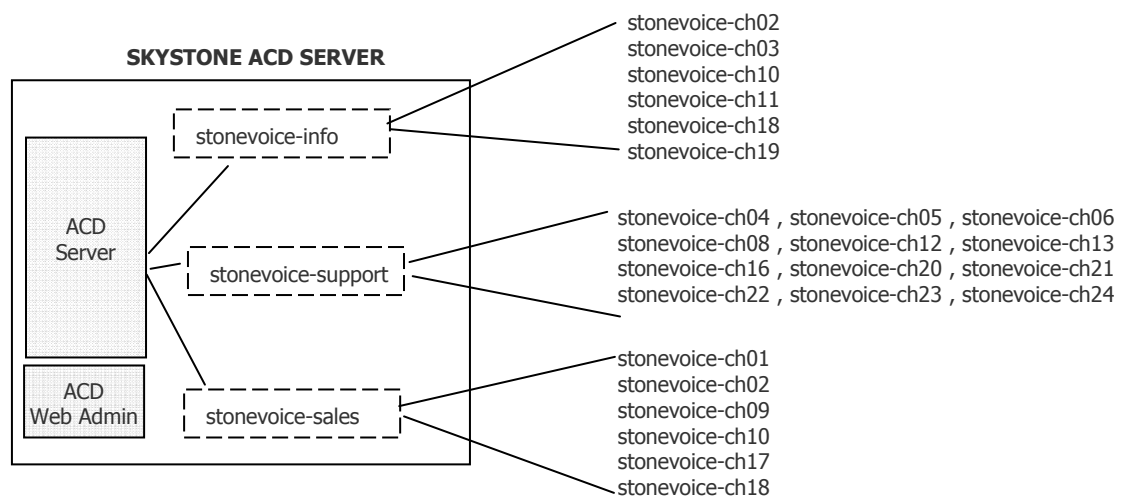
The image shows a dialog box titled "ENGINE CONFIGURATION" with a yellow background. It contains three configuration items: "Transfer Delay" with a text input field containing the number "2", "SkypePresence" with a checked checkbox, and "RoundRobin" with an unchecked checkbox. Below these items is an orange "Save" button. At the bottom right, there is a label "Last message:" followed by a blank space. A red oval highlights the "Transfer Delay" input field.

Click the Save button and then restart the Engine.

## 5. REDUNDANCY AND SCALABILITY

SkyStoneACD can dispatch calls to SkyStone channels regardless where they are. You can reach redundancy by dispatching calls to channels managed by different SkyStone and having a hot-standby configuration where:

- should any SkyStone machine have a problem, the SkyStoneACD will simply dispatch to the other ones without stopping the service.
- Adding more SkyStone machine will increase the scalability and number of total concurrent channels available



Ex: with one SkyStoneACD and couple of SkyStone 8 channels, you have created a redundant SkyStone architecture with up to 16 concurrent channels available.

## 6. CONFIGURATION

Configuration is web based available with Internet Explorer through the link:  
<http://x.x.x.x:7508/>

where x.x.x.x is the SkyStoneACD machine IP address in our example.

You will be starting from a login page where logging in with default username/password: admin/admin



Supposing you have configured the skype account Sv.SkyStone during the First Run configuration wizard, you will find this available dispatcher by clicking on the CONFIGURE link:



You need now to add the SkyStone channels to dispatch the calls to in the "Available channels" section.

You can add channels here by clicking on the "Add Channel" button and specify the SkyStone channels you want to dispatch the calls from Skype, ex: sv.skystone.001, sv.skystone.002 and sv.skystone.003



Click on the "Save" button to activate your configuration:



**Drag and drop** these channels to the dispatcher to have SkyStoneACD managing the Sv.SkyStone skype account and redirecting calls to this account to the first available channels among sv.skystone.001, sv.skystone.002 and sv.skystone.003.



Click on the "Save" button available on the Sv.SkyStone frame.



You can change the order of the channels account in the Sv.SkyStone frame to change the order the SkyStoneACD will dispatch calls.

SkyStoneACD can be configured in two different ways:

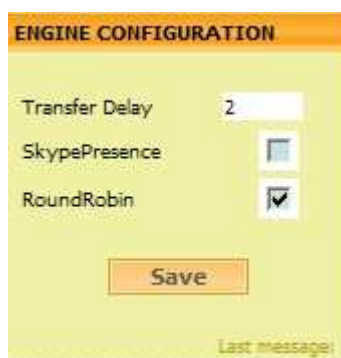
### 1. Without checking presence status:

For each incoming call to SkyStoneACD, the engine will dispatch the call to the first channel assigned to that dispatcher without spending time in verifying the first available/free one.

If the channel is busy the call will get back to the dispatcher which will try again with the next available channel.

This is the 'branch and bound' mechanism which is the preferred one as the skype transfer operation is very fast and there is no need of a synchronized presence/status for channels.

To configure the main dispatching mechanism, go to the "Configure" menu on the web interface and change the "SkypePresence" parameter accordingly as follow:



ENGINE CONFIGURATION

Transfer Delay 2

SkypePresence

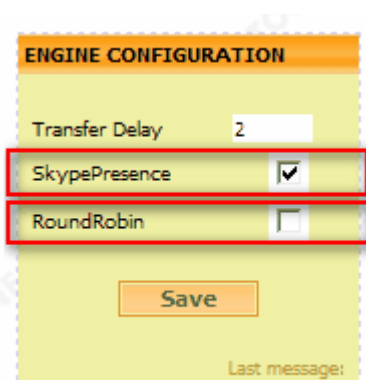
RoundRobin

Save

Last message:

### 2. Checking presence status through Skype presence servers:

For each incoming call to SkyStoneACD, the engine will check the first available SkyStone channel by querying the Skype presence servers.



ENGINE CONFIGURATION

Transfer Delay 2

SkypePresence

RoundRobin

Save

Last message:

It is also possible to enable the RoundRobin mechanism to dispatch calls starting from the last used/dispatched channel.

For example if the SkyStoneACD is configured as follow:

sv.skystone --> sv.skystone.001 , sv.skystone.002

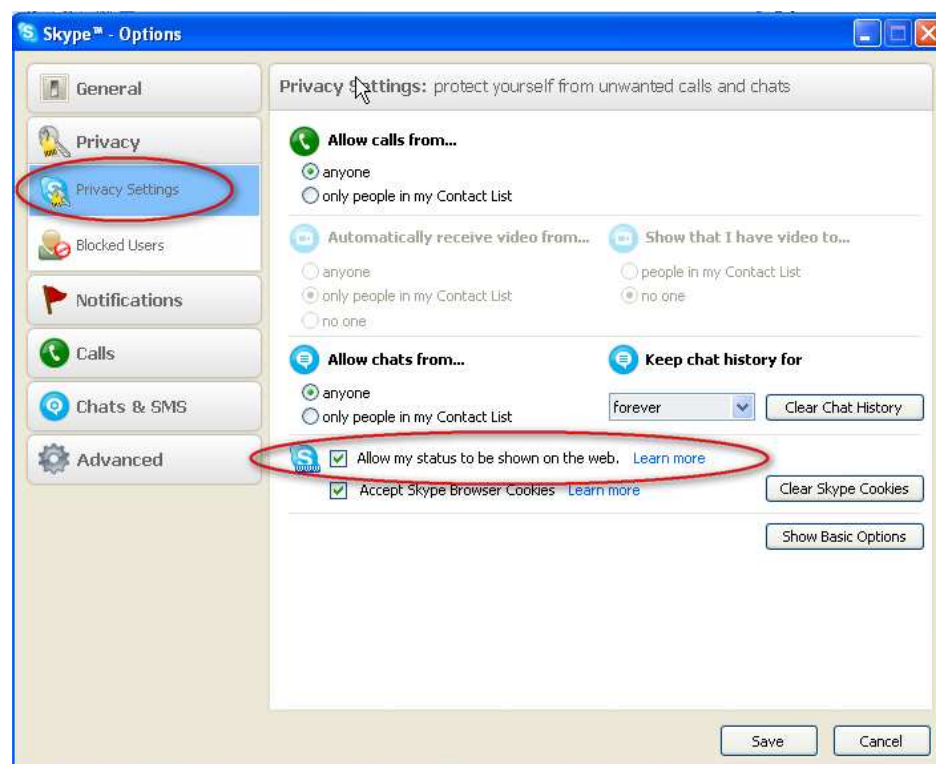
- without RoundRobin, the call will be first dispatched to sv.skystone.001, then to sv.skystone.002
- with RoundRobin enabled, the first call will be first dispatched to sv.skystone.001, next call will be first dispatched sv.skystone.002, ..  
When using SkyStoneACD without Skype presence checking, the RoundRobin mechanism is automatically applied to avoid overhead in dispatching the calls.

To let ACD engine access to the SkyStone channel status, it is needed to configure the "web status" option on each SkyStone channel.

So all channels accounts the SkyStoneACD has to dispatch the calls to, needs to be configured to allow their status to be shown on the web.

This is a mandatory configuration step to accomplish on every SkyStone machine where the channel accounts are running.

Connect to the SkyStone machine through VNC or directly to the console and modify the property of each instance of skype running as per below figure:



This procedure is mandatory for the SkyStoneACD to correctly understand the status of the channel accounts.

## 7. MANAGE SKYSTONEACD

At this point you need to start SkyStoneACD by clicking the Start Engine button on the ENGINE link as per the following image:



The SkyStoneACD is the key element of a SkyStone solution and consequently needs to be completely reliable and safe.

That's why it is based on a robust angel process able to monitor both the Skype instances and the engine process and guarantee Skype and engine recover after any kind of issue.

Moreover it can support a 'cluster' configuration where two different SkyStoneACD machines running the same configuration can manage all incoming calls in a redundant mode.

## 8. MONITOR

By clicking on the MONITOR link, you can access the dispatcher monitor and see the status of the channel accounts of each dispatcher.

The monitor will be only available for channels accounts configured for showing their status on the web (see previous chapter).

After having started the SkyStoneACD engine, if you don't have any activity on both SkyStone and SkyStoneACD, you should see all the channels configured in the Online status as per below figure:



If you don't see the channels in the Online status, please check the properties of the browser as per below image:



If you still don't see the status of channel accounts or the status is unknown, get back to the configuration chapter and be sure to have modified the properties of each channel for the status to be shown on the web.

On every incoming skype call to the dispatcher account:

- The SkyStoneACD checks the status of the channels associated to that dispatcher and transfers the call to the first available one (skipping the accounts in the 'DO NOT DISTURB' status).
- When the call is transferred to the available channel, the relative SkyStone Server receiving the call (RINGING) changes the status of that channel to 'DO NOT DISTURB'.
- When the call completes, SkyStone restores the channel status to 'ONLINE'



## 9. CONFIGURE ADDITIONAL DISPATCHERS

If you need to configure new dispatchers on SkyStoneACD to have additional skype accounts to publish (ex: sv.support, sv.info), you must connect to the SkyStoneACD through VNC or directly to the console and start the First Run configuration wizard. Here after having confirmed the configuration of the first dispatcher click on next button to configure the second dispatcher and next again for the third one, press Exit when you have configured all the dispatchers (you must have a valid license).

This done, connect to the SkyStoneACD web interface as per Configuration chapter and you will find all the added dispatchers available for the configuration: you can now drag and drop the channel accounts you would like the dispatcher to redirect the incoming calls to.

The screenshot displays the 'Automatic Call Dispatcher' web interface. The top navigation bar includes 'MONITOR', 'CONFIGURE', and 'LICENSE' tabs, with 'CONFIGURE' selected. The main content area is divided into three panels:

- AVAILABLE CHANNELS:** Lists three channels: sv.skystone.001, sv.skystone.002, and sv.skytone.003. Each has a delete icon (X). Below are 'Refresh', 'Add Channel', and 'Save' buttons.
- SV.SKYSTONE:** Shows configuration for the first dispatcher. It includes a 'Notes' section with 'Added by FirstRun Procedure 26/11/2007 1.00.59'. Below is a 'CHANNELS ACCOUNT' section with the same three channels and delete icons. It also has 'Refresh', 'Add channel', and 'Save' buttons. A status message at the bottom reads: 'Last message: Dispatcher to Channels successfully - Channels to DB successfully - Export successful'.
- CDESIGN.IT:** Shows configuration for the second dispatcher, mirroring the structure of the first dispatcher panel.

The bottom screenshot shows the 'Channel status' for both dispatchers. The 'sv.skystone' section shows three channels: sv.skystone.001 (Do Not Disturb), sv.skystone.002 (Online), and sv.skytone.003 (Online). The 'cdesign.it' section shows the same three channels, all in an 'Online' state. A 'Configuration details' box on the right contains the text: 'Please check your browser configuration clicking here'.

## 10. SKYSTONE CONFIGURATION

On each SkyStone machine the calls from the SkyStoneACD will be dispatched to, you may need to add specific rules depending on how you want to connect the call.

SkyStone ships with a default rule connecting "All Skype accounts" to the number 201@192.168.10.1

If you just want all skype incoming calls to be connected to a single number (ex: the company auto-attendant/operator), you just need to change the relative number and IP address as per SkyStone system guide without having to add any additional rule.

If you want to match the specific called account, you have to add a dedicated rule.

Example: you configured two dispatchers in the SkyStoneACD to publish the skype accounts sv.info and sv.support.

You need calls from skype to sv.info to be connected to 1000@192.168.10.1, while calls from skype to sv.support to be connected to 2000@192.168.10.1  
Then you need to create two different rules on SkyStone(s) matching the two different accounts as per below image:

The screenshot shows the SkyStone configuration interface. At the top, there's a navigation bar with 'SETTINGS', 'DEFINITIONS', and 'RULES'. Below that, there's a search bar and a table of rules. The table has columns for ID, Enabled?, Preference, Group, Source (Skype called), Destination (VoIP), Log, and Description. Two rules are visible: ID 50 for sv.info pointing to 1000@192.168.10.1, and ID 51 for sv.support pointing to 2000@192.168.10.1. The 'GO TO' buttons are circled in red.

This is a close-up of the rule table from the screenshot. It shows two rows: ID 50 for sv.info pointing to 1000@192.168.10.1, and ID 51 for sv.support pointing to 2000@192.168.10.1. The 'GO TO' buttons are circled in red.

## 11. CONTACTS

Web: <http://www.stonevoice.com>  
<http://support.stonevoice.com>  
Email: [support@stonevoice.com](mailto:support@stonevoice.com)