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Cuba for Microsoft Outlook - Avaya TSAPI Manual Cuba Version 1.3

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0. PRELIMINARIES

0.1 PUBLISHED BY

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0.2 COPYRIGHT

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0.3 DOCUMENT HISTORY

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0.4 BIBLIOGRAPHY

0.4.1 Referenced Documents

- [1] TSAPI, http://support.avaya.com/elmodocs2/AES/4.2/02-300544_i4.pdf

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1. INTRODUCTION

This manual provides a complete guide to preparing, installing and configuring your telephone system, Cuba and Microsoft Outlook for computer telephony integration. For best results follow the manual in chronological order. No specific skills are required but some knowledge of IT can be useful. This manual attempts to make all the necessary steps as painless as possible.

2. OVERVIEW

Cuba for Outlook software enables Computer Telephony Integration (CTI) between most business grade telecom systems, PBX's, and Microsoft Outlook.

The Cuba software consists of two components; the Cuba Server and the Cuba Client. The Cuba Server communicates with your telephone system via a TSAPI interface. The Cuba Client communicates with your Microsoft Outlook application.

The diagram below illustrates a typical installation.



The Avaya TSAPI Server provides an application programming interface which allows Cuba Server to control your telephone system and receive events. This interaction is two-way. For example, the Cuba client can make a call on a selected extension which is a message essentially from Cuba to the telephone switch. However, some telephony data is initiated on the telephone system. An example would be an incoming call. The TSAPI Server presents this 'delivered' event to Cuba Server and Cuba client can screenpop this information at a Microsoft Outlook users desk.

The TSAPI component above is a software product sourced from Avaya. The TSAPI Server connects to Definity G3, Avaya 8xxx Media servers with Communication Manager with either Avaya Application Enablement Services, Avaya Computer Telephony 1.2 or 1.3 or Avaya CentreVu CT.

3. PREPARATION

3.1 OPERATING SYSTEM REQUIREMENTS

The Cuba Server should be installed on an 'always on' PC on the network.

System Requirements are:

512MB RAM

1.2GHz CPU

Ethernet Port

Operating System – Microsoft Windows: Vista, XP, 2000, 2003, NT

Cuba client can run on any Microsoft Windows platform from Windows 95+.

Administering Cuba Settings

Cuba's settings are configured in the Cuba Web Administrator - a web interface to Cuba Server. Your web browser must support Java Script.

3.2 CONFIGURING TELEPHONY INTERFACE

The Cuba Server communicates with the Avaya telephone system via a TSAPI Server, which must be fully installed and configured.

Avaya sites typically use the following components:

Media Gateway. Essentially a 'gateway' to telephone hardware such as telephones, trunks, etc.

Media Server. A server component which is available to the computing function – eg Cuba.

The media gateway is traditionally what people consider as a telephone system. The media server is a component which opens up telephony for CTI applications. The interface component, TSAPI Server, lets Cuba access the telephone hardware, Media Gateway, via the Media Server.

Legacy Avaya Definity or G3 systems can be configured with a MAPD card which provides a network interface.

Whatever Avaya hardware is used, the TSAPI Server must be installed and configured. On the TSAPI Server configuration create a user account which has full control over all the devices (agent extensions) which you would like to control via Cuba. Email support@iteloffice.com should you require assistance.

The following information is required:

IP address of TSAPI Server.

Advertised name of TSAPI Server. (Advertised TSAPI name is of the form AVAYA#CSTASERV#CSTA#TSAPISERV where TSAPISERV is the hostname of the TSAPI Server).

TSAPI Server username. User account configured in TSAPI Server assigned to control selected extensions.

TSAPI Server password.

This information is required to configure Cuba Server via the web administrator discussed later in this document.

3.3 CONFIGURING MICROSOFT OUTLOOK

No specific Microsoft Outlook configuration is required. Microsoft Outlook must be installed on each Cuba client workstation for the solution to have any value of course.

Cuba client extracts telephone numbers from the following fields at startup:

Business phone

Home phone

Mobile phone

These fields have the following MAPI identifiers:

PR_OFFICE_TELEPHONE_NUMBER

PR_HOME_TELEPHONE_NUMBER

PR_CELLULAR_TELEPHONE_NUMBER

Any numbers stored in other fields, for example fax or pager will not be matched.

The non alpha-numeric characters are stripped from the stored number and stored internally by Cuba4Outlook. There is also a setting to strip off the country code – see configuring Cuba Server section for details.

Cuba4Outlook performs an exact comparison of the telephone system provided Caller ID (or Called ID if selected) with each stored number. So ideally the numbers stored in Outlook should be similar to the numbers presented by the telephone system. Various options are available to 'massage' the telephone system provided number for matching purposes. Refer to the configuring Cuba Server section for details.

Version 1.3 Cuba4Outlook searches only the Microsoft Outlook top level standard Contacts folder. This is the folder in Personal folders. A planned version 1.4 will support specifying a different folder, for example, a folder under Public Folders.

3.4 NETWORK CONFIGURATION

Your Cuba Server communicates on ports 6090 and 8080. Port 6090 is used for communication of telephony data and port 8080 is used for web administration. So you should make sure that these ports are not used by other applications.

Also, ensure that any firewalls configured between the Cuba Server and Cuba clients do not block ports 6090 and 8080.

3.5 CUBA CLIENT

The Cuba Client communicates with the Cuba Server on port 6090* so this (tcp) port must be open.

* This can be edited in the 'Telephony Server Port' field under 'Server Settings' in the Cuba Web Administrator.

4. INSTALLATION

This section covers the basics of downloading and installing your Cuba software and introduces you to the Cuba Web Administrator - the web administration panel where you can modify your settings. The Web Administrator is covered in depth in Section 4.6.

Download and installation of Cuba is fast and intuitive but we've covered it here anyway in a step-by step guide.

4.1 TRIAL PERIOD & LICENCING

During the trial period your Cuba Server software restricts your operation of Cuba for Outlook to three hours of continuous use at a time. Restart the Cuba Server to resume operation.

You are free to install the Cuba Client on as many workstations as you have available.

You can apply for a licence by filling in the application form under 'Unlock you Trial' in the Cuba **Web Administrator** – or contact us direct: support@iteloffice.com

4.2 DOWNLOADING CUBA

Download your Cuba Software at: www.iteloffice.com

To get going with Cuba you need to first download the software. The download operates intuitively and takes just a couple of minutes – but just for the record here's a simple visual overview – using Firefox as the web browser...

Log onto the designated Windows NT/2000/XP/Vista/2003 PC as an administrator.



click 'Save File' >> double click on details >> click 'OK' >>

4.3 INSTALLING CUBA SERVER

Then the InstallShield Wizard will launch - this will first install the Cuba Server. In this section we will first install the Cuba Server then return to install the Cuba Client.

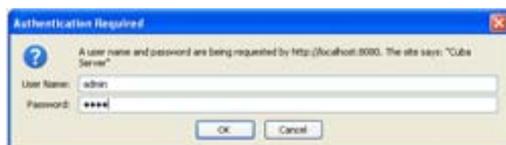


Click Next >> accept licence >> enter name >> click Next >>



Click Next >> installs >> click finish >>

A dialog box will appear...



Enter:

User Name: **admin**

Password: **cuba**

Click 'OK' and the Cuba Web Administrator launches automatically on the 'Settings' page. You can start entering your settings immediately but for the purpose of this tutorial we'll return to install the Cuba Client and deal with settings in the next Section.

The Cuba Server installation copies a file, TSLIB.INI to the install folder. The default install folder is **C:\Program Files\office\Cuba**. Edit this file by entering the IP address of the TSAPI Server. If Cuba server is installed on the same computer as the TSAPI server you can enter 127.0.0.1 as the IP address.

Example where IP address of TSAPI Server is 192.168.0.50:

[Telephony Servers]

192.168.0.50=450

After editing, copy this file to the computers Windows directory. This is usually C:\Windows. On some computers it may be C:\WINNT or a custom location. If in doubt type `echo %WINDIR% <ENTER>` at a command prompt.

4.4 INSTALLING THE CUBA CLIENT

To install your Cuba Client,

Click: 'Start' > 'All Programs' > 'Cuba' > 'Install Cuba Client' >

As previously, the InstallShield Wizard will launch... again, work through the wizard until you reach 'Finish'.

Once you have completed the wizard you will notice that the Cuba Telephone Icon... appears in your System Tray.



Double Click on the Telephone Icon and a dialog box with a drop down menu will appear - click on the down arrow to reveal a drop down box that displays your extensions.



Choose your extension and Click 'Select'. You'll see that the Cuba Telephone Icon has turned green to indicate you have successfully connected Cuba to your telephone extension.



4.5 INSTALLING CUBA CLIENT ON A TARGET WORKSTATION

You'll find the Cuba Client installation program in your Cuba Server installation folder - which by default is: <C:\Program Files\looffice\Cuba4Outlook>.

The Cuba Client installation file is: [cubaout_client_setup.exe](#).

If you want to install the Cuba client on other workstations, copy the [cubaout_client_setup.exe](#) file to a shared network location - accessible from other workstations - then run the Setup Program on as many workstations as you require.

Note: You can install the Cuba Clients on as many workstations as you like. Your licence will determine how many concurrent Cuba Clients can connect to a Cuba Server.

Our free trial allows unlimited concurrent Cuba Clients but the Cuba Server shuts down after 3 hours operation. Restart the Cuba Server to resume operation.

4.6 THE CUBA WEB ADMINISTRATOR

You can control Cuba's Application Settings in the Cuba Web Administrator.

This is a web front end that allows quick and easy configuration of your Cuba Server.

The Web Administrator launches automatically during initial installation and opens on the 'Settings' tab. This gives you a series of simple form fields where you can enter configuration details.

4.6.1 NAVIGATING TO THE WEB ADMINISTRATOR

You'll be able to return here to review and edit all of your settings whenever you need to. You'll find the Cuba Web Administrator alongside the Cuba Software Files in your Program File - simply click on:

Start > All Programs > Cuba > Cuba Web Administrator > or

If your Cuba Server is installed on your local machine you can use the address 127.0.0.1.

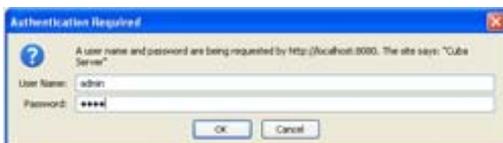
If your Cuba Server is installed elsewhere on your network, launch your web browser and navigate to the hostname or IP address of the computer where your Cuba Server is installed.

Append : 8080 to the hostname, for example: <http://MyComputerName:8080>

This is because the Cuba web server uses the non standard port 8080 so as not to conflict with alternative web servers which may be configured on the Cuba Server computer.

4.6.2 PASSWORD PROTECTION

Each time you open it a dialogue box will appear...



As before enter:

User Name: [admin](#)

Password: [cuba](#)

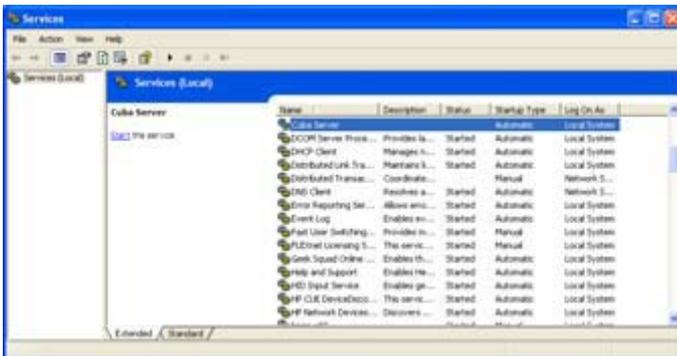
Click 'OK' and the Cuba Web Administrator launches automatically on the 'Settings' page.

If you get a Page Load Error then either the Cuba Server is not hosted on your machine or your trial version needs to be restarted.

Go to:

Start > Control Panel > Administrative Tools > Services >

Scroll Down to 'Cuba Server' > Click 'Start'



The Cuba Server will restart. You may need to restart your browser in order to access the Cuba Web Administrator.

5. CUBA CONFIGURATION

5.1 CONFIGURING CUBA SERVER

All of Cuba's settings can be controlled in the Cuba Web Administrator. A menu on the left hand side can be used to navigate to the individual sections.

5.2 OUTLOOK SETTINGS

The default settings screenpop a ringing call on the Caller ID with no special telephone number behaviour apart from Cuba4Outlook client removing non alpha-numeric characters from Outlook telephone numbers before attempting to match.

There are a number of reasons why customising this default configuration will make screenpop more reliable. Spending a little time familiarising yourself with the following options could make your use of Cuba considerably more rewarding.

The data fields are:

Prefix

If the telephone number provided by the telephone system does not contain some characters which appear in the telephone numbers in Outlook, then the missing characters can be pre-pended to the Caller ID (or Called ID). For example, some telephone systems strip out the first part of the number. If the full Caller ID is 01222123456 the telephone system might only provide 1222123456. Enter 0 to pre-pend the zero so that Cuba client uses 01222123456 for matching.

Suffix	See Prefix above. Same principle but provides the facility to append characters to the end of the Caller ID (or Called ID) string.
Telephony data	By default the Callers number (Caller ID) is sent from Cuba Server to Cuba client for screenpop. The called number can be sent instead if this makes more sense in your environment – for example if customers dial set numbers to reach you.
Event to pop	Default setting screenpops on a ringing (alerting) call. For some situations it is more convenient to screenpop when the call is answered. Select Connected to have Cuba wait until call is answered before screenpopping.
Full or minipop	Cuba client has a feature called minipop which presents a small un-intrusive window 2cm by 2cm in the bottom right of the screen. This does not tend to 'take over' the screen as a full screenpop of an Outlook form would and can be more convenient. Select minipop to use this feature. Note that this will set the default pop type for the Cuba client can be over-ridden by individual users in the Cuba client.
Screenpop internal calls	Internal calls include calls transferred from agent to agent so generally it is most appropriate to select this option.
Strip Outlook country code	If a telephone number is entered in Outlook it can simply be saved as entered. However, if you configure the area code then Outlook can format the number with a country code prefixed with a +. If the number with area code is 01222111111 and the country code is 44 for UK (area code 01222) then Outlook stores the number as: +44 (01222) 111111. Selecting this option removes the +44 leaving the number as 01222111111. Although not a default option, it is recommended to select this option unless you experience problems using it.

5.3 CUBA LOGS

Select the Logs section to view or delete Cuba Server logs. The log file provides a history of what is happening on the Cuba Server.

5.4 DEVICES

In this section you need to enter all the call centre agents extension numbers. Not the agent ID, the actual telephone hardware/handset extension number. The Cuba client extension logon dialog is populated with the contents of the list defined here.

5.5 CTI LINK

Enter the TSAPI Server name, TSAPI User name and TSAPI password as discussed in the telephony section.

5.6 SERVER SETTINGS

Web Server Port	This is the port that the Cuba web server listens on and is 8080 by default. If you wish to communicate on another port enter the port no. here. Remember to restart the Cuba (Server) after editing this value.
Telephone Server Port	This is the port that the Cuba telephony server listens on and is 6090 by default. If you wish to communicate on another port enter the port no. here. Remember to restart Cuba (Server) after editing this value.

5.7 HELP

Help on configuring Cuba Server.

5.8 UNLOCK TRIAL

To get a full user licence you will need to purchase an Activation Key. Enter your contact details here and click 'Send Registration Request'. We will contact you to discuss payment options and the registration process.

5.9 REGISTER

Once you have received your Activation Key copy and paste it here and click 'Save'. You will then get unrestricted use of Cuba for the number of seats that you have purchased.

6. TROUBLESHOOTING

6.1 LOGGING

Cuba Server writes logging information to a log file, cubasvr.txt, in the Itel subdirectory of the common application data folder. The location of this folder varies dependent on Windows version. On Windows XP this folder is likely to be C:\Documents and Settings\All Users\Application Data\Itel. Type ECHO %ALLUSERSPROFILE% <ENTER> at a command prompt to find this folder on your system. Prepend \Application Data\Itel to the returned string.

To enable full logging select Full in the Logging level dropdown in the server section of Cuba web administrator.

Now debug level errors and informational messages will be logged to cubasvr.txt which can provide very useful troubleshooting information.

7. SIMULATING CALLS

You can use the Cuba simulator to test a configuration without requiring a connection to a real telephone system. Therefore, CTI development and basic testing can be performed on a laptop. Customer testing can then be performed at a later stage when a CTI link is available.

To use the simulator, install the Cuba client program and follow these steps:

1. Right click on Cuba client systemtray icon and select Open menu.
2. Click Settings button.
3. Click Simulator button.
4. The Cuba Simulator screen allows you to enter a caller ID, called number, call ID or user data which can be used to screenpop Outlook.

Note that the behaviour will be dependent on the rules configured in the Cuba web administrator. Complete this configuration first.