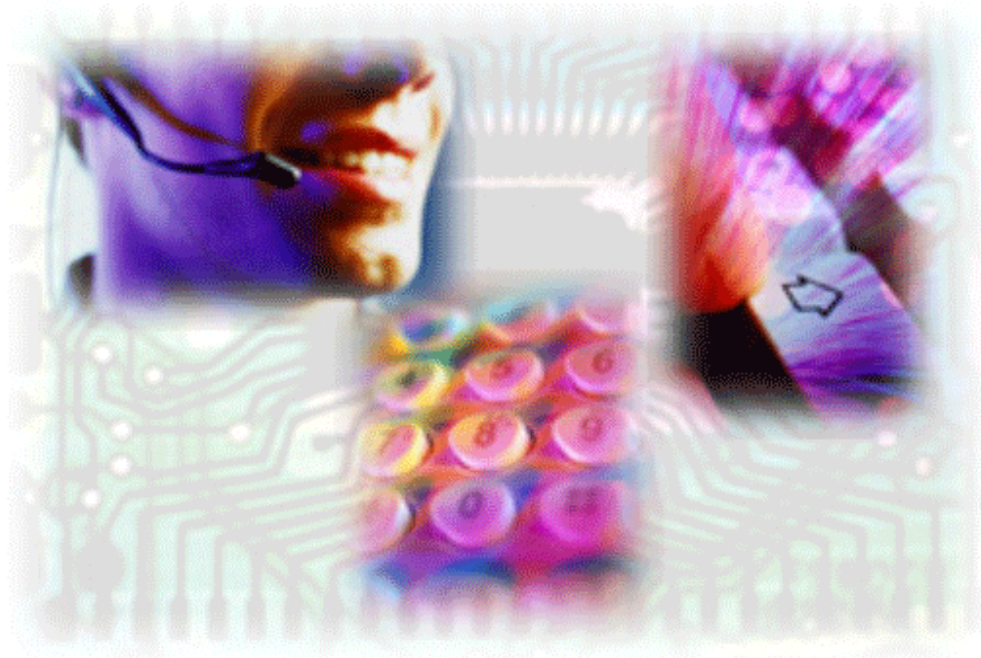


# EVO<sub>ip</sub> active for innovaphone



## Installation Manual

Version 9.0  
Date 2010/03/05

This manual is valid for the following ASC products:

- EVO<sub>ip</sub> Server Software

Please note, that you can always find the most up-to-date technical documentation on our web site at <http://www.asctelecom.com> (partner area). The ASC partner portal also provides the latest product updates.

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1 **Introduction**

This manual describes the settings necessary for operating the VoIP recording integration "EVO<sub>ip</sub> active for innovaphone".

**HINT**

The operation of the ASC EVO<sub>ip</sub> recorder in an innovaphone SIP environment requires firmware version 7.0 or higher in the end devices of in the innovaphone PBX as well as in the innovaphone end devices. If you have questions about the compatibility, please contact your innovaphone sales partner in advance.

1.1 **Overview of the Recording Solution**

The ASC recording solution "EVO<sub>ip</sub> active for innovaphone" is an active voice over IP recording solution in the innovaphone environment.

The recorder is logged on at the PBX as a SIP end point. If a call is to be recorded, a conference is set up to the recorder. The tagging of additional call data (own phone number, partner phone number, call direction) is done by analyzing the SIP protocol. The partnership with innovaphone has brought about a unique VoIP recording solution. The following powerful recording functions have been integrated in innovaphone phones:

- Automated recording as soon as a call is made on this phone.
- Recording control by press of a key (record on demand). The recording is started and stopped by pressing a key on the phone.
- The user is informed via the phone display if a call is recorded.
- Automated detection, decryption and recording of encrypted calls if encryption has been activated on the end device to be recorded (independent of the selected transport protocol).

The figure below shows the schematic setup of the recording solution.

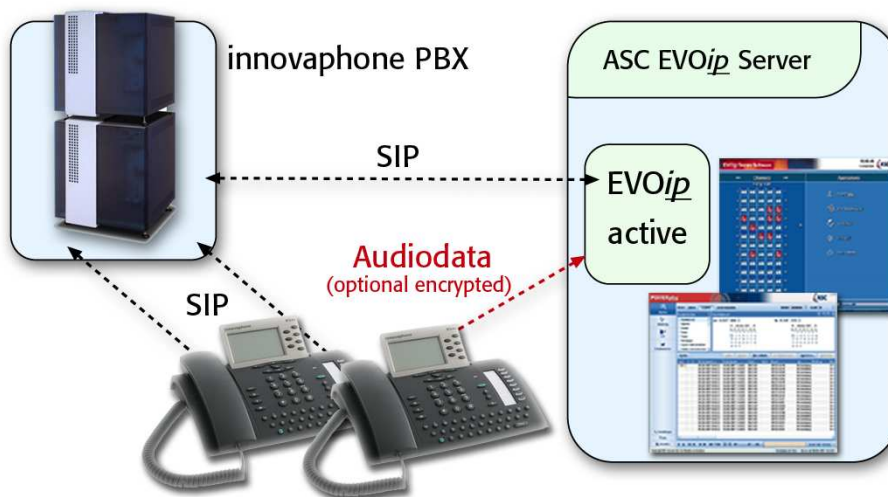


Fig. 1 - Overview



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**2 System Requirements**

**2.1 ASC Components**

**Recorder**

**Version** Version 9.0 or higher

**Licenses** Licenses for the product EVO<sub>ip</sub> active for innovaphone are required. This license also covers the recording of encrypted calls.

**2.2 innovaphone Components**

**2.2.1 IP PBX (e.g. IP302)**

**Version** Version 7.0 or higher

**2.2.2 End Devices (e.g. IP110, IP200, IP230)**

**Version** Version 7.0 or higher

## 3

## Configuring the EVOip active for innovaphone

To operate the EVO<sub>ip</sub> active in an innovaphone environment, the recorder has to be registered as a SIP end device at the innovaphone PBX.

For this purpose, a SIP subscriber has to be created on the innovaphone PBX with a phone number and the desired protocol parameters. The parameters specified in the PBX have to be considered in the recorder configuration (see below). It is not necessary to configure special recording settings on the PBX.

1. Connect to your PBX via the Internet browser and log on using your user name and password (standard values for IP302: admin and ip302).
2. Select the *PBX* on the left and click the *Objects* field in the menu bar at the top. To create a new subscriber (user) click *new*.

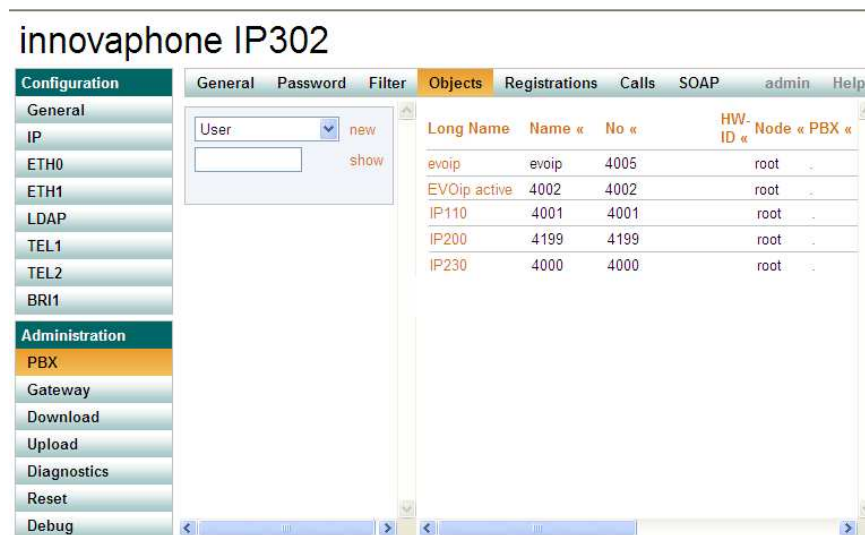


Fig. 2 - innovaphone IP302: PBX Subscriber

- Enter the desired data for the recorder in the configuration mask. Enter the same value for *Name* and *Number* (e.g. 4002). This value also has to be entered ASC DataManager in the EVO*ip* active configuration in the field *Extension* (see section 3.1.1 - [Configuring the EVO\*ip\* active](#)).

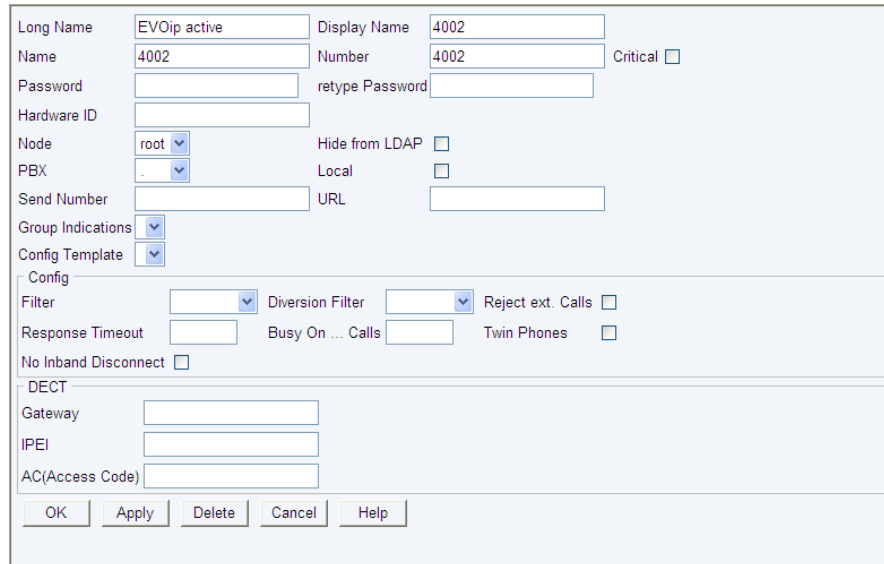


Fig. 3 - innovaphone IP302: PBX – Subscriber Settings

Further information about the configuration of a subscriber on a innovaphone PBX is provided in the user manual of the innovaphone PBX.

### 3.1 Configuring the EVO*ip* Server Software

To operate the EVO*ip* active in an innovaphone environment, the following basic settings in the ASC DataManager are required.

- [3.1.1 - Configuring the EVO\*ip\* active](#)
- [3.1.2 - Configuring the EVO\*ip\* active Channels](#)

#### 3.1.1 Configuring the EVO*ip* active

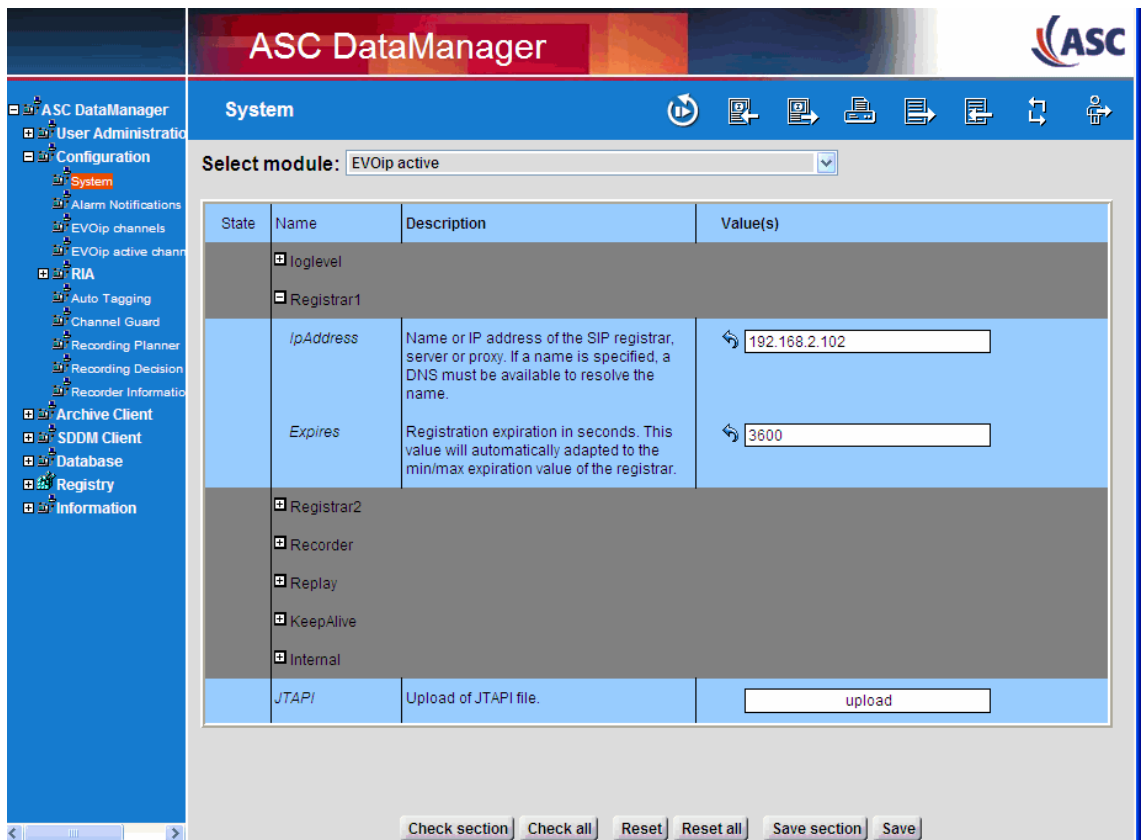
From the start screen of the EVO*ip* Server Software, launch the ASC DataManager.

In the ASC DataManager, open the *Configuration* submenu in the hierarchical structure on the left-hand side of the window, and select the item *System*. From the System window on the right-hand side, select the *EVO*ip* active* tab.

Click the plus sign of the entry *Registrar1* and set the parameters as follows:

Parameter	Value
<b>IpAddress</b>	IP address of the innovaphone PBX
<b>Expires</b>	If required, you can adapt the expiry time of the registration in seconds to the value set in the innovaphone PBX (default value of the PBX: 120 s).

Table 1 - Configuring Registrar1



The screenshot shows the ASC DataManager interface. The left sidebar contains a tree view with the following items: ASC DataManager, User Administration, Configuration, System, Alarm Notifications, EVOip channels, EVOip active channels, RIA, Auto Tagging, Channel Guard, Recording Planner, Recording Decision, Recorder Information, Archive Client, SDDM Client, Database, Registry, and Information. The main area is titled 'System' and has a 'Select module:' dropdown set to 'EVOip active'. Below this is a table with columns: State, Name, Description, and Value(s). The table contains the following entries:

State	Name	Description	Value(s)
	loglevel		
	Registrar1		
	IpAddress	Name or IP address of the SIP registrar, server or proxy. If a name is specified, a DNS must be available to resolve the name.	192.168.2.102
	Expires	Registration expiration in seconds. This value will automatically adapted to the min/max expiration value of the registrar.	3600
	Registrar2		
	Recorder		
	Replay		
	KeepAlive		
	Internal		
	JTAPI	Upload of JTAPI file.	upload

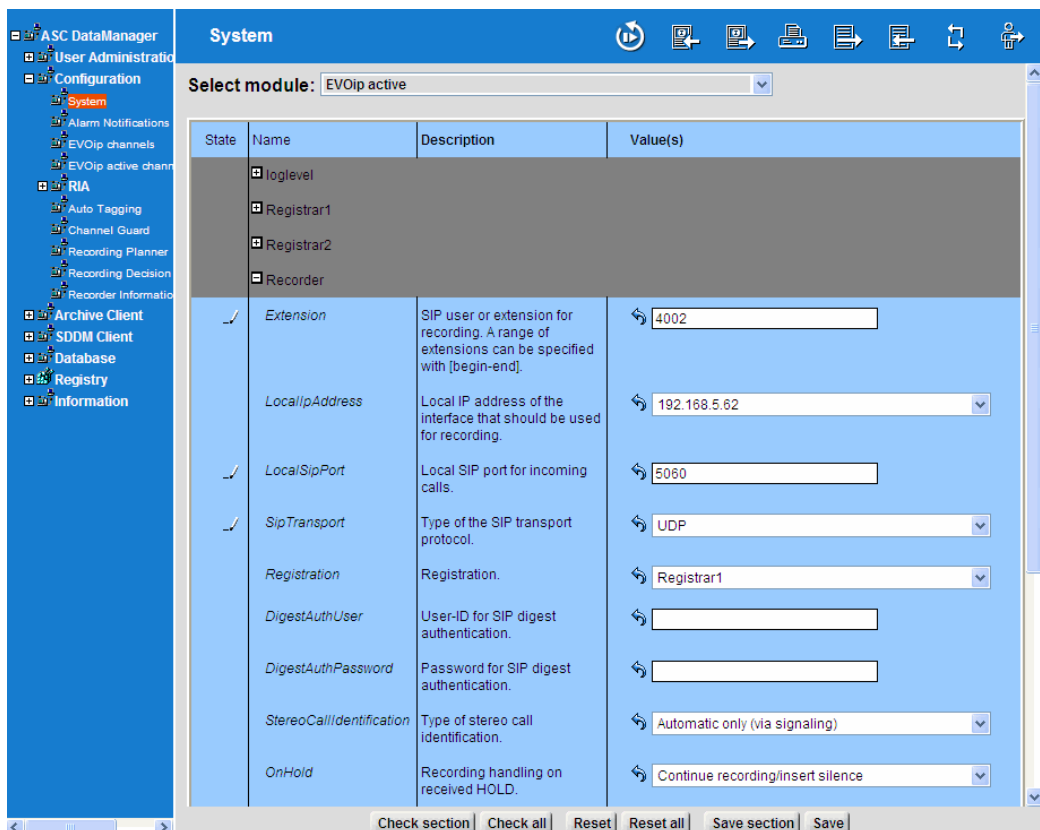
At the bottom of the interface, there are buttons: Check section, Check all, Reset, Reset all, Save section, and Save.

Fig. 4 - ASC DataManager: Menu Configuration - System - EVOip active - Registrar1

Click the plus sign of the entry *Recorder* and set the parameters as follows:

Parameter	Value
<b>Extension</b>	Phone number of the recorder configured in the innovaphone PBX beforehand (e.g. 4002).
<b>LocalIpAddress</b>	Select the IP address of the recorder used for SIP registration on the PBX and for recording (all active network interfaces are available).
<b>LocalSipPort</b>	5060
<b>SipTransport</b>	Select the desired transport protocol. It has to be identical with the protocol selected on the innovaphone PBX. If you wish a certificate check in the TLS protocol, disable the field <i>DisableCertCheck</i> . Please note that an appropriate root certificate is required on the recorder in this case (see section 3.1.1.1 - <a href="#">Uploading a Certificate</a> ).
<b>Registration</b>	Registrar1
<b>DigestAuthUser</b>	If SIP authentication is enabled in the innovaphone PBX, the "SIP Digest Authentication User" entered in the innovaphone PBX has to be entered here.
<b>DigestAuthPassword</b>	If SIP authentication is enabled in the innovaphone PBX, the "SIP Digest Authentication Password" entered in the innovaphone PBX has to be entered here.

Table 2 - Configuring the Recorder



The screenshot shows the configuration interface for the 'Recorder' module. The 'System' module is selected, and the 'Recorder' entry is expanded. The configuration table is as follows:

State	Name	Description	Value(s)
	loglevel		
	Registrar1		
	Registrar2		
	Recorder		
✓	Extension	SIP user or extension for recording. A range of extensions can be specified with [begin-end].	4002
	LocalIpAddress	Local IP address of the interface that should be used for recording.	192.168.5.62
✓	LocalSipPort	Local SIP port for incoming calls.	5060
✓	SipTransport	Type of the SIP transport protocol.	UDP
	Registration	Registration.	Registrar1
	DigestAuthUser	User-ID for SIP digest authentication.	
	DigestAuthPassword	Password for SIP digest authentication.	
	StereoCallIdentification	Type of stereo call identification.	Automatic only (via signaling)
	OnHold	Recording handling on received HOLD.	Continue recording/insert silence

Buttons at the bottom: Check section, Check all, Reset, Reset all, Save section, Save

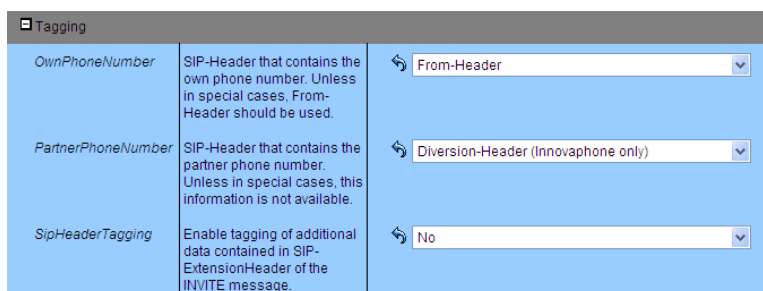


Fig. 5 - ASC DataManager: Menu Configuration - System - EVO<sub>ip</sub> active - Recorder

Click the plus sign of the entry *Recorder - Tagging* and set the parameter as follows:

Parameter	Value
<b>PartnerPhoneNumber</b>	Diversion-Header This innovaphone-specific setting tags the partner number and the call direction (incoming or outgoing) in addition to the own phone number.

Table 3 - Configuring the Recorder - Tagging



Parameter	Description	Value
<i>OwnPhoneNumber</i>	SIP-Header that contains the own phone number. Unless in special cases, From-Header should be used.	From-Header
<i>PartnerPhoneNumber</i>	SIP-Header that contains the partner phone number. Unless in special cases, this information is not available.	Diversion-Header (Innovaphone only)
<i>SipHeaderTagging</i>	Enable tagging of additional data contained in SIP-ExtensionHeader of the INVITE message.	No

Fig. 6 - ASC DataManager: Menu Configuration - System - EVO<sub>ip</sub> active - Recorder - Tagging

Click the **Save** button to store your configuration.

#### HINT

By default, codecs G.711 A-Law, G.711  $\mu$ -Law and G.729 are supported.

#### 3.1.1.1 Uploading a Certificate

If a certificate check is to be done in the case of TLS, an appropriate root certificate (according to Standard X.509v3 in the file format *.pem*) has to be copied manually to the recorder in the directory mentioned below, and the EVO<sub>ip</sub> active service has to be restarted manually.

**Linux**            */usr/asc/bin/ip\_active*

**Windows**        depending on the setup, e.g. *C:\Programs\ASC\EVOLUTION\bin\ip\_active*

#### 3.1.2 Configuring the EVO<sub>ip</sub> active Channels

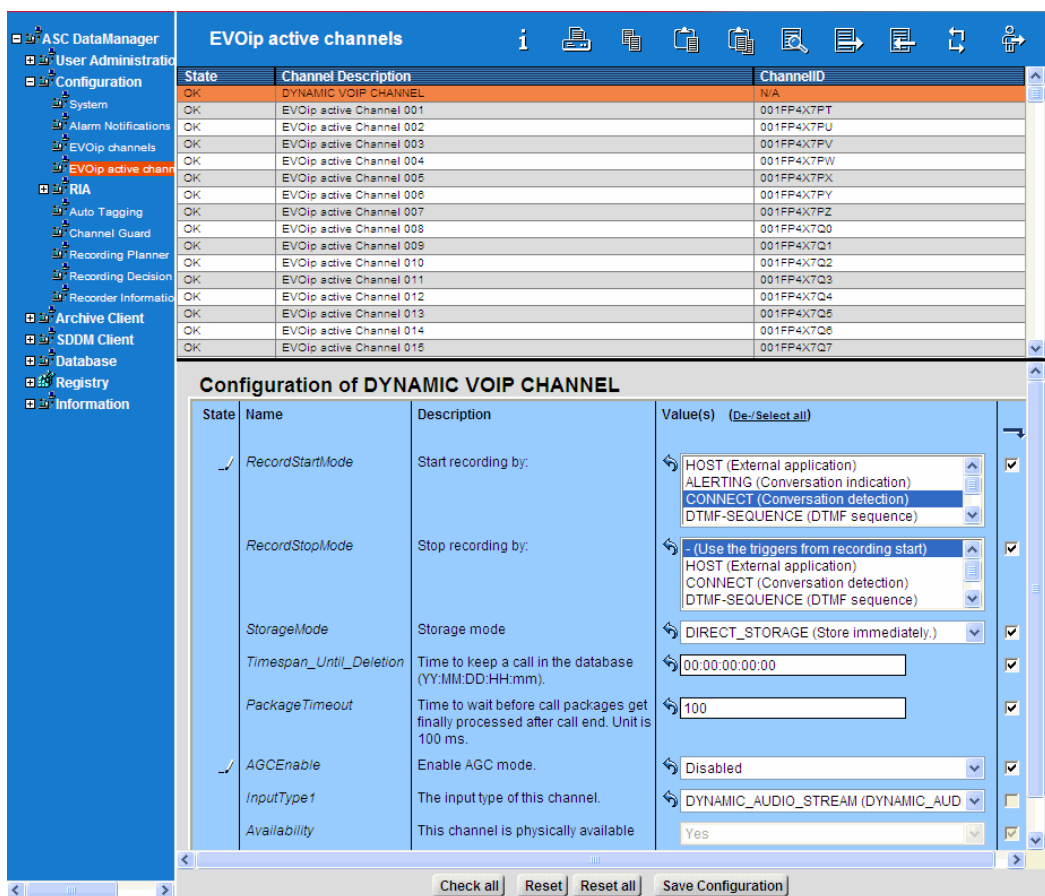
From the start screen of the EVO<sub>ip</sub> Server Software, launch the ASC DataManager.

In the ASC DataManager, open the *Configuration* submenu in the hierarchical structure on the left-hand side of the window, and select the item EVO<sub>ip</sub> active channels.

In the channel list, select the channel *DYNAMIC VOIP CHANNEL* and configure the parameters as follows.

Parameter	Value
<b>RecordStartMode</b>	CONNECT (Conversation detection)
<b>RecordStopMode</b>	- (Use the triggers from recording start)
<b>StorageMode</b>	DIRECT_STORAGE (Store immediately)
<b>InputType1</b>	DYNAMIC_AUDIO_STREAM

Table 4 - Configuring the *DYNAMIC VOIP CHANNEL*



The screenshot displays the 'EVOip active channels' configuration window in ASC DataManager. The top section shows a list of channels with columns for State, Channel Description, and ChannelID. The 'DYNAMIC VOIP CHANNEL' is selected. The bottom section shows the configuration parameters for this channel:

State	Name	Description	Value(s) (De-/Select all)
<input checked="" type="checkbox"/>	RecordStartMode	Start recording by:	HOST (External application) ALERTING (Conversation indication) <b>CONNECT (Conversation detection)</b> DTMF-SEQUENCE (DTMF sequence)
	RecordStopMode	Stop recording by:	- (Use the triggers from recording start) HOST (External application) CONNECT (Conversation detection) DTMF-SEQUENCE (DTMF sequence)
	StorageMode	Storage mode	DIRECT_STORAGE (Store immediately.)
	Timespan_Until_Deletion	Time to keep a call in the database (YY:MM:DD:HH:mm).	00:00:00:00:00
	PackageTimeout	Time to wait before call packages get finally processed after call end. Unit is 100 ms.	100
<input checked="" type="checkbox"/>	AGCEnable	Enable AGC mode.	Disabled
	InputType1	The input type of this channel.	DYNAMIC_AUDIO_STREAM (DYNAMIC_AUD)
	Availability	This channel is physically available	Yes

Buttons at the bottom: Check all, Reset, Reset all, Save Configuration

Fig. 7 - ASC DataManager: Menu Configuration – Configuration EVOip active Channels (DYNAMIC VOIP CHANNEL)

In the channel list, select the active channel to be configured and set the parameter as follows.

Parameter	Value
InputType1	DYNAMIC

Table 5 - Configuring the Active Channels

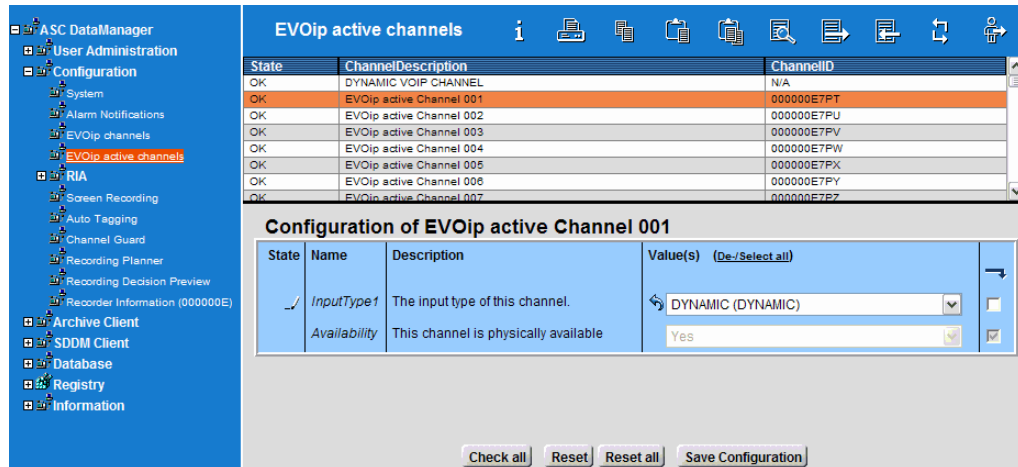


Fig. 8 - ASC DataManager: Menu Configuration – Configuration EVOip active Channels (EVOip active Channel)

Repeat these settings for all further channels.

Click the **Save** button to store your configuration.

You can find further information, e.g. about the configuration of static channels, in the Installation Manual of the ASC DataManager (06\_Basic\_Configuration - MARATHON EVOLUTION\_Product\_Family) - Chapter 3.5 - Configuration - EVOip active Channels.

### HINT

To check your configuration, you can carry out a simple function test by making a phone call to the recorder. The recording should start now.

## 3.2 Configuring the innovaphone End Devices

Depending on the end device type, the configuration of the end devices may vary. In this example, an innovaphone IP230 end device was used. Please proceed as follows:

1. Connect to your end device via the Internet browser and log on using your user name and password (standard values for IP230: admin and ip230).
2. Select the desired registration (1 to 6) on the left and click the *Recording* field in the menu bar at the top.

3. The following recording variants can be set under *Mode*:
  - *Manual*: The recording of the active call is started and stopped manually by pressing the redialing key or the function key to which the recording function was assigned.
  - *Transparent*: The recording will be started automatically as soon as a call starts and terminated at the end of a call. It is not possible to stop the recording manually.
  - *Optional*: The recording will be started automatically as soon as a call starts. It can be stopped manually and restarted by pressing the redialing key or the function key to which the recording function was assigned.
4. Under *Number*, enter the phone number of the recorder (e.g. 4002) which you have previously configured in the innovaphone PBX and on the recorder.
5. Under *Name*, enter the phone number of the recorder (e.g. 4002) which you have previously configured in the innovaphone PBX and on the recorder.
6. If only external calls are to be recorded, activate *External Calls Only*.
7. To start or stop the recording only via a function key, activate *Function Key Control Only*. The redialing key keeps its normal function in this case.



Fig. 9 - innovaphone IP230: Administration Menu