

# iPECS

## CCS Record

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### User Manual

iPECS is an Ericsson-LG Brand

Please read this manual carefully before operating your set. Retain it for future reference.



## Revision History

ISSUE	DATE	DESCRIPTION OF CHANGES
1.8	2014-02-28	Applied new BI

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## 1. iPECS CCS RECORD

### 1.1 CCS Record with Analog Trunk

#### 1.1.1 Pre-Installation Requirements

The requirements for CCS Record are divided into two parts:

##### 1.1.1.1 System Requirements

##### 1.1.1.2 Installation of CCS Desk and CCS Report

###### 1.1.1.1 System Requirements

The CCS Record Server must meet the following minimum specifications.

<b>CCS Record Recommended Hardware</b>				
<b>Install Scope</b>	<b>Up to 8 channels a maximum of 1,600 calls per day</b>	<b>Up to 30 channels and a maximum of 5,000 calls per day</b>	<b>Up to 120 channels and a maximum of 20,000 calls per day</b>	<b>Up to 600 channels and a maximum of 1,000,000 calls per day</b>
<b>Dedicated Server Required</b>	Yes	Yes	Yes	Yes
<b>Dedicated SQL Server Required</b>	No	No	No	No
<b>Virtual Server Possible</b>	No	No	No	No
<b>Operating System</b>	Windows 7 Professional or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2
<b>CPU</b>	I3 2120 3.3GHz	I3 2120 3.3GHz	I3 2120 3.3GHz	I3 2120 3.3GHz
<b>RAM</b>	2 GB	4 GB	8 GB	16 GB
<b>Disk Space</b>	500 GB	1 TB	1 TB	3 TB
<b>USB Port</b>	1 for each recording hardware	1 for each recording hardware	1 for each recording hardware	1 for each recording hardware

## 1.1.1.2 Installation of CCS Desk and CCS Report

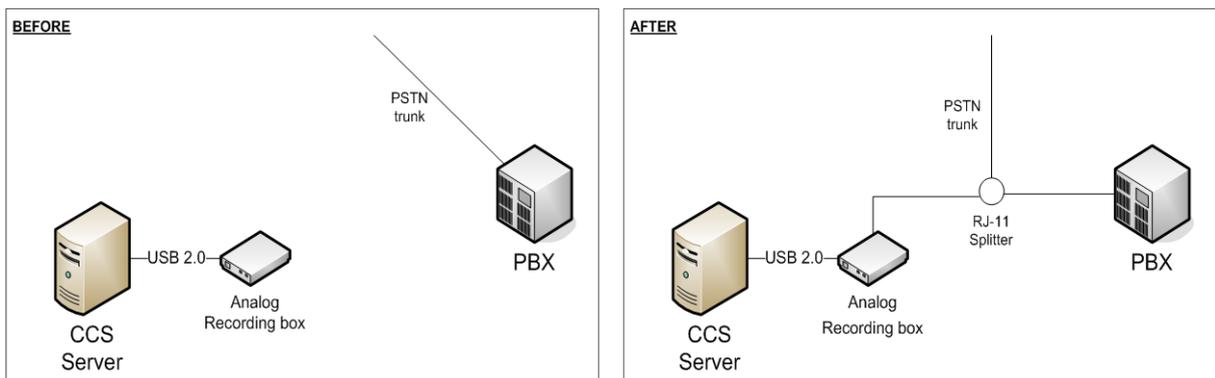
Before CCS Call can be configured, the installation of CCS Report and CCS Desk must be completed. Please consult Section 2 and Section 3 for more information.

## 1.1.2 Installation

### 1.1.2.1 Connect the Analog Trunk

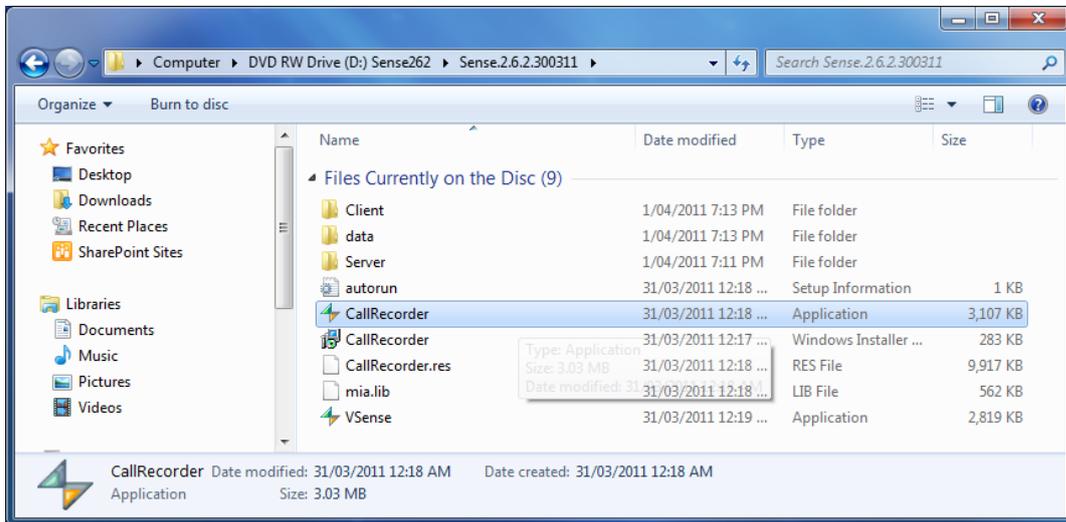


RJ-11 Y-splitter is used to split each Analog Trunk lines so a stream can go into the recording box. As illustrated with the diagram below, the splitter is used between the trunk and the PBX.



## 1.1.2.2 Install Call Recorder

Step 1 - Browse to the recording box software DVD → Run the **CallRecorder.exe**



Step 2 - You will be prompted to **install any prerequisites** that may be required (Service Packs, SQL Express) → Select **Yes** to install.

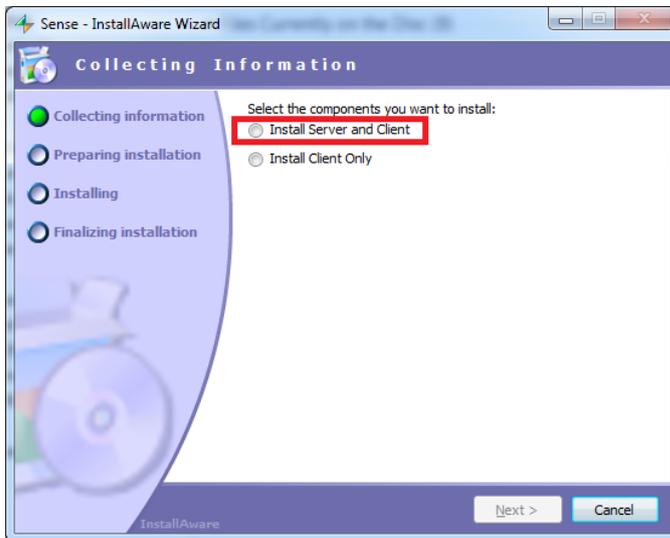
Step 3 - If you are prompted to **reboot** → Select **Yes**.

Once you log back in, the installation will continue where it left off.

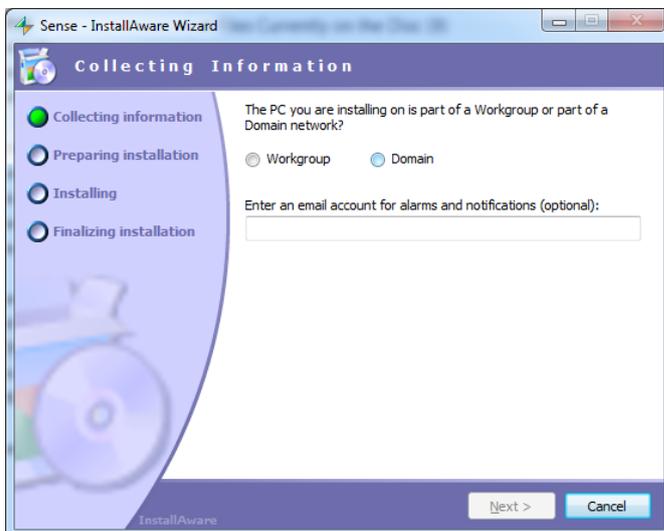
Step 4 - The installer will also recommend that you **connect the recording box** to the Server via USB port and ignore/cancel the 'Found new hardware' wizard.

→ Connect the **hardware** → Click **Next**.

Step 5 - When presented with the option → Select **Install Server and Client** → Click **Next**.



Step 6 - Depending on the **network configuration** → Specify **workgroup** or **domain** → You will also need to enter an **email address** for notifications → Click **Next**.



Step 7 - **Read and Agree to the license agreement** → Click **Next**.

Step 8 - You will need to specify the **path details** → Click **Next**.

**Application Files** – Defaults to C:\Program Files\Retell\Sense

**Data Folder (Temporary Storage)** – Defaults to the Application Folder

**Audio Storage Folder** – Defaults to the Application Folder

**Backup Folder**

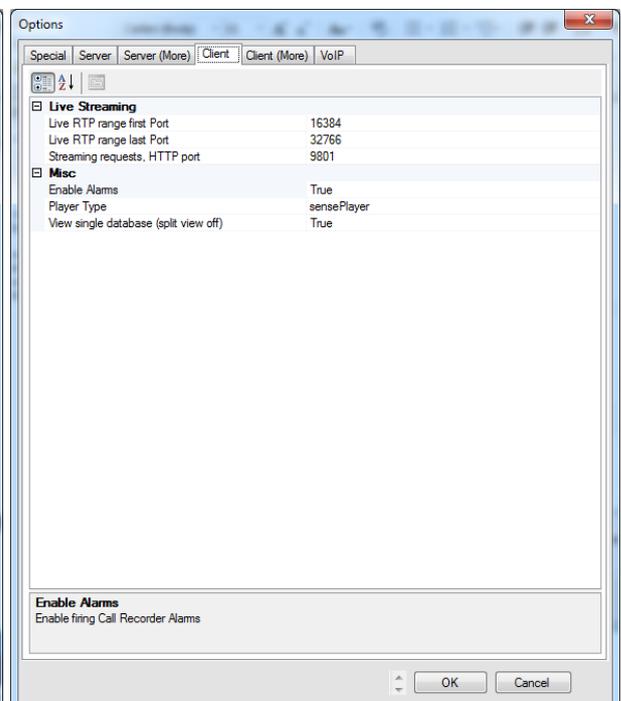
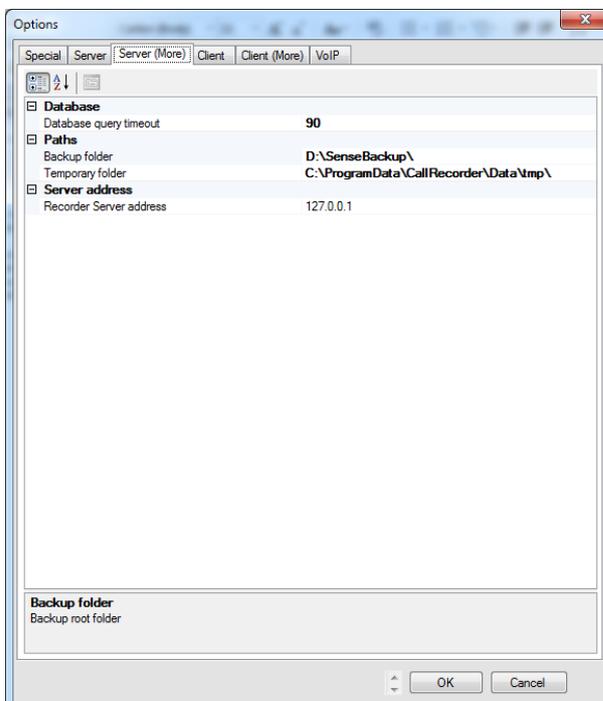
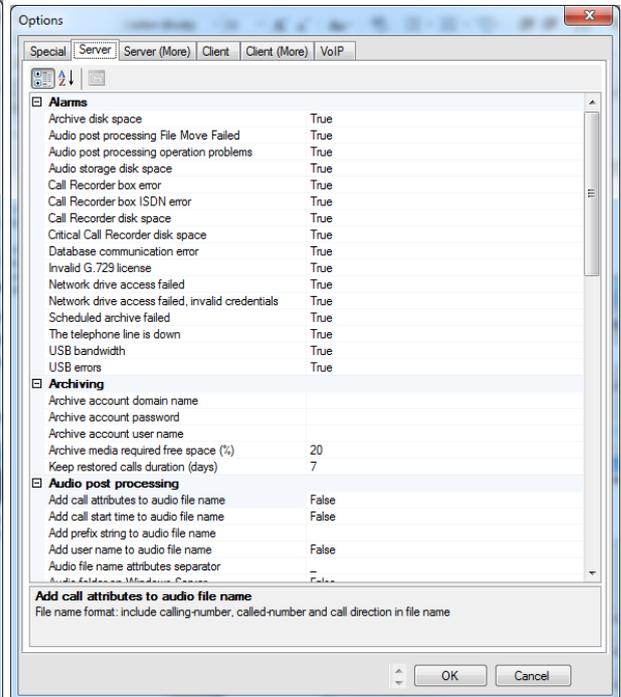
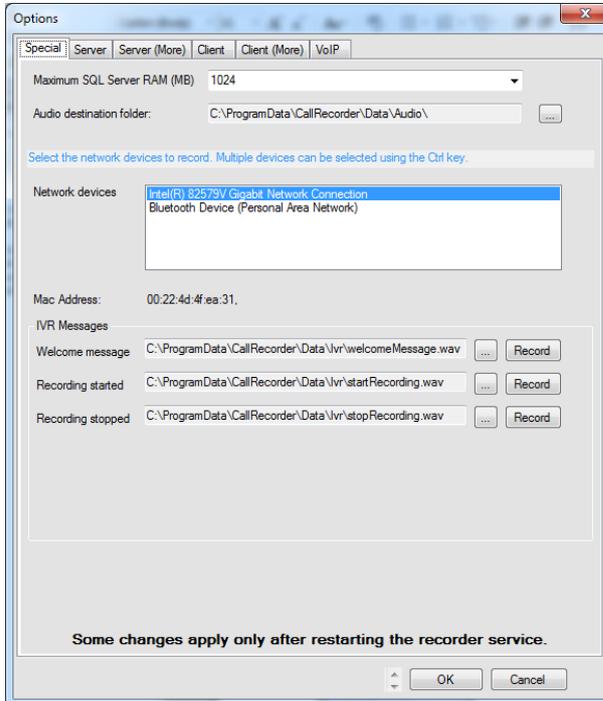
**SQL Root Folder** – Defaults to C:\Program Files\Microsoft SQL Server

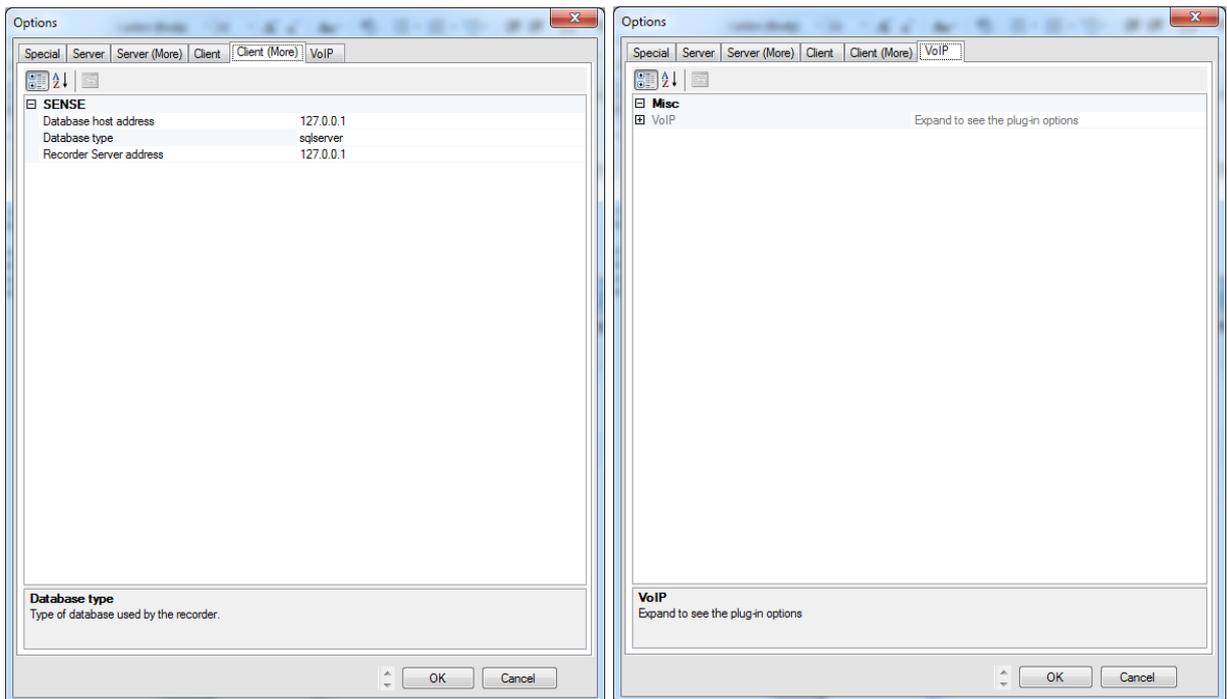
**Client Location** – Default to C:\Program Files\Retell\Sense Calls

Step 9 - The installer will detect and **install the device drivers**.



Step 10 - The post configuration screens will be displayed to review → No changes are required.

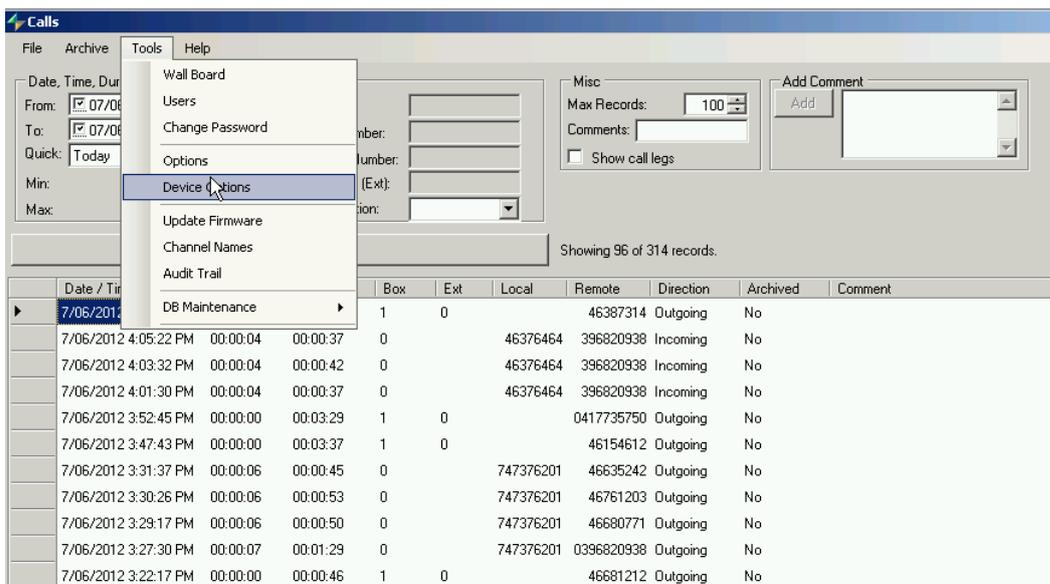




Step 10 - If you want to test **Sense** that calls are being received or to change configuration options → Open **Calls** from the shortcut place on the **Desktop**.

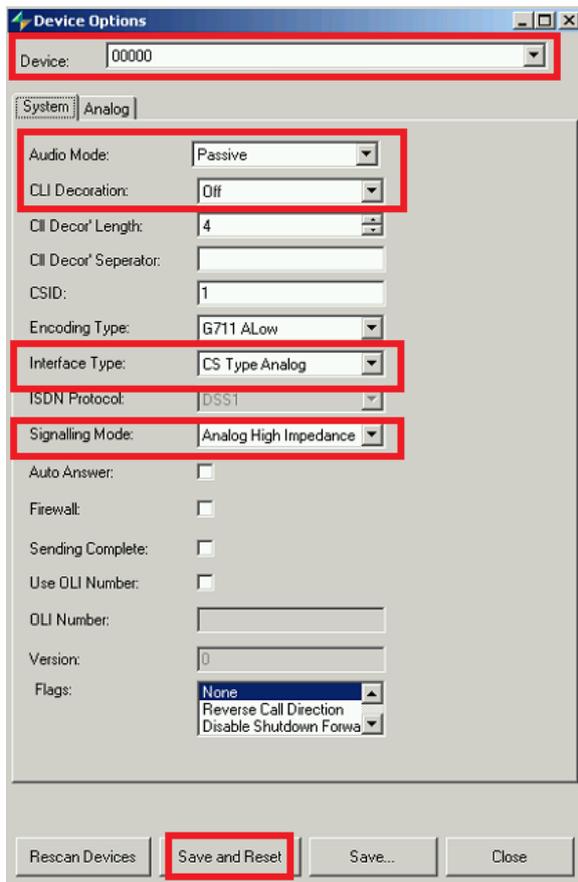
The username is **admin**.

The password is **callrecorder**.



## Note

If after placing tests calls this does not show up, you will need to check **Tools → Device Options**.



Typical configuration for Analog Trunk:

**Audio Mode = Passive**

**CLI Decoration = Off**

**Interface Type = CS Type Analog**

**Signalling Mode = Analog High Impedance**

Ensure you **Save and Reset** when finished making changes.

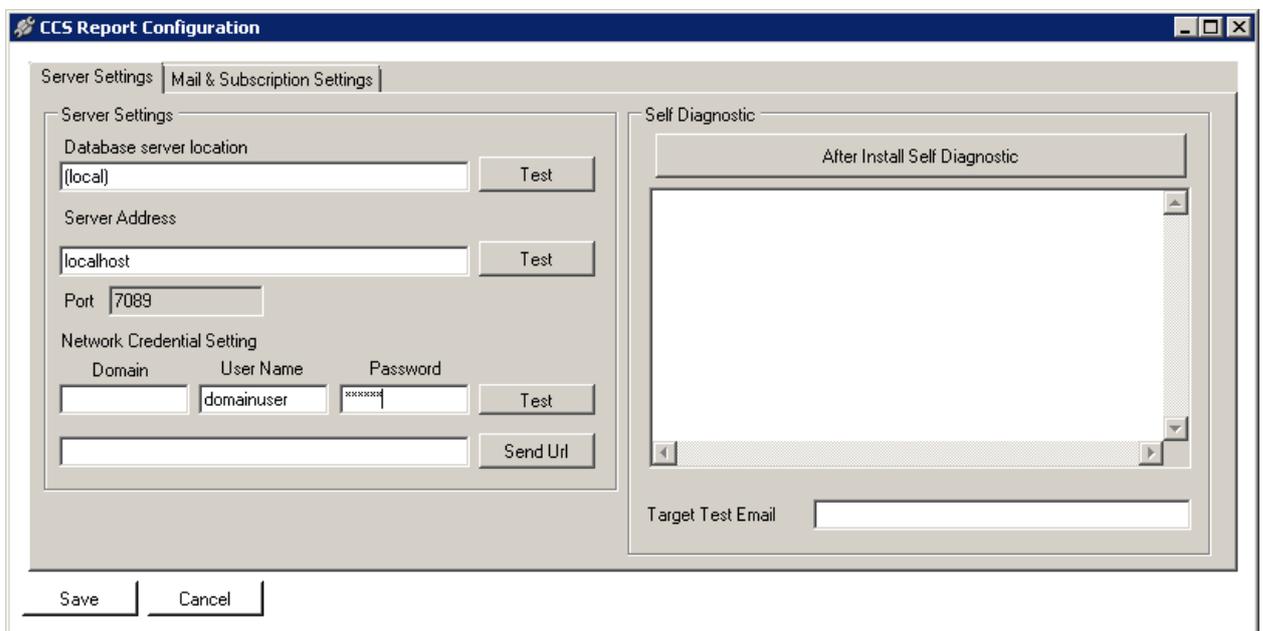
If there are multiple devices connected to the server, change the selected **Device** to configure the other hardware.

## 1.1.2.3 Configure CCS Report

To link the reports with the recorded audio files, a few things must be configured properly.

Step 1 - CCS Report connection type **MUST** be configured to **CTI**. This can be configured during the installation Config Wizard, or by using CCS Report Manager.

Step 2 - CCS Report Config **MUST** contain a valid network credentials, otherwise access to recordings will require a username and password each time.



Step 3 - If the CCS Record service and recording hardware is installed on a different machine to CCS Report, the **Web.config** file located in the **CCSReportWebGUI** installation folder needs to be adjusted to reflect the location of the Sense installation.

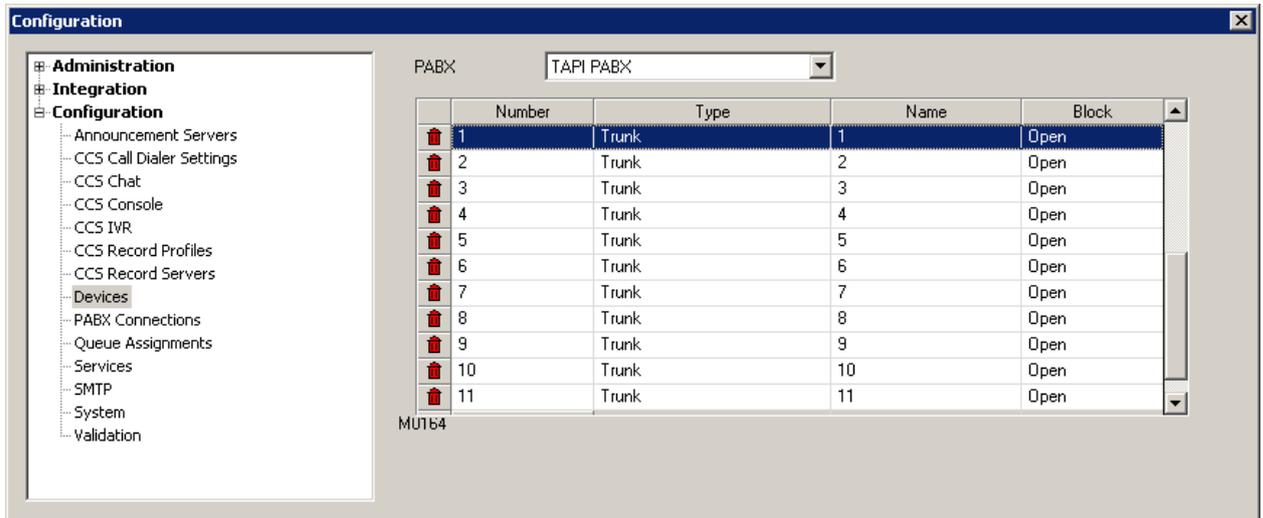
Open the **Web.config** file with Notepad (Right Click → Open With... → Notepad)

→ Search for the line below and set the 'value' with the machine name or IP address of the Sense machine.

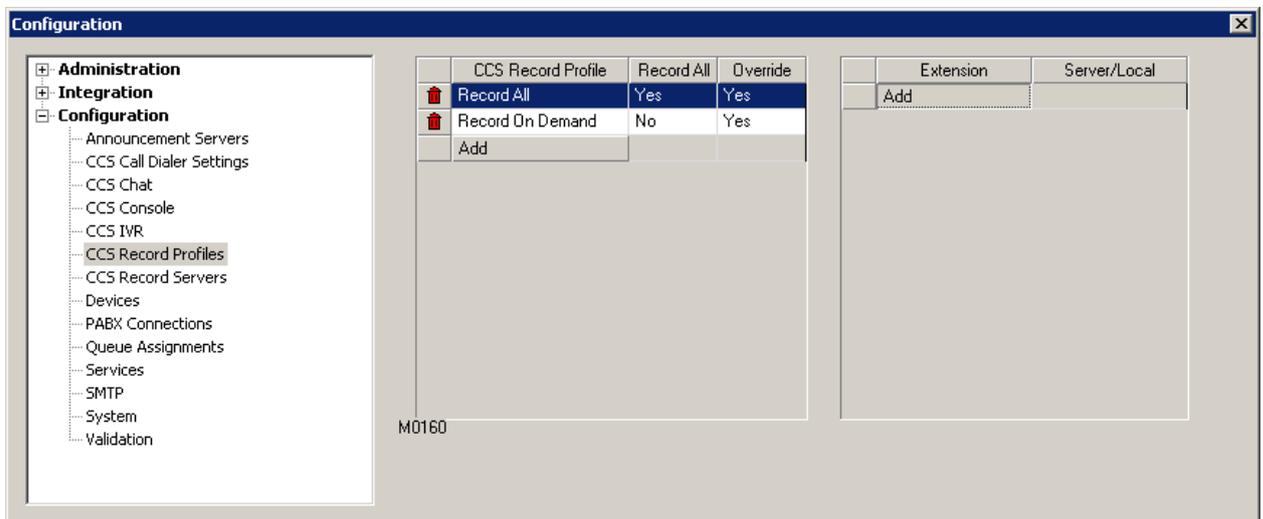
```
<add key="SenseServer" value="localhost"/>
```

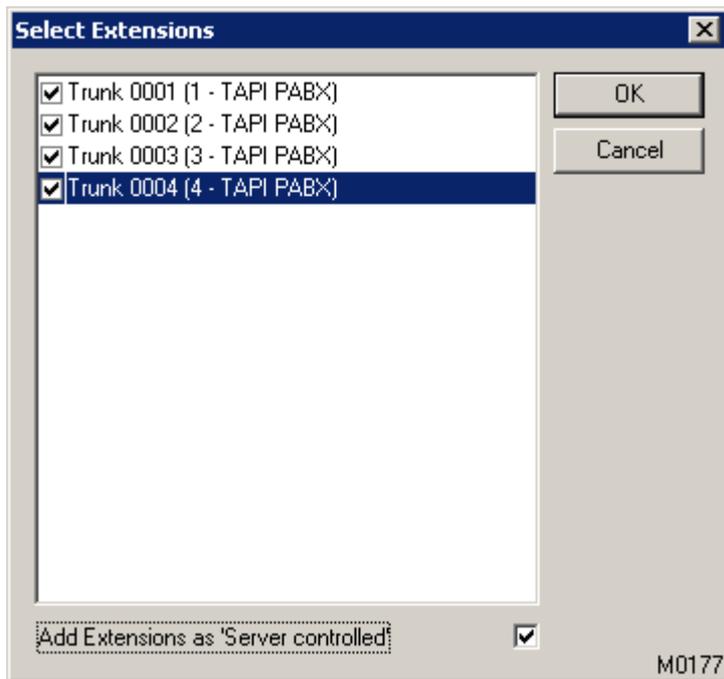
## 1.1.2.4 Configure CCS Desk

Step 1 - Run **CCS Desk Manager** → Go to the **Devices** tab → **add the analog trunks** to the **Devices** list.

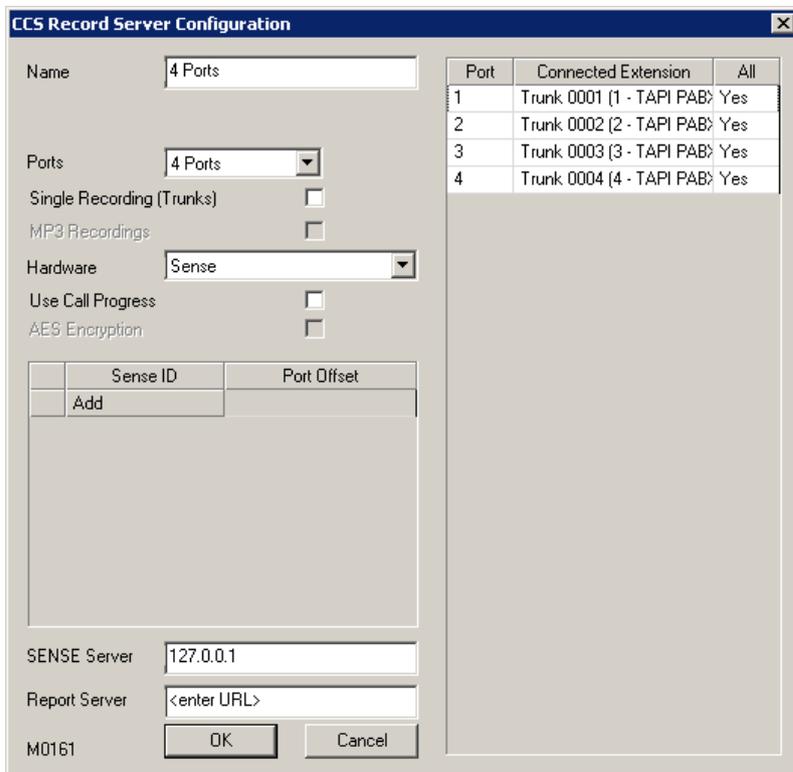


Step 2 - Go to the **CCS Record Profiles** → add the **trunks** as **Server Controlled** devices.





Step 3 - Go to the **CCS Record Servers** → **Create a recording configuration profile** → **Map the trunks into the ports.**



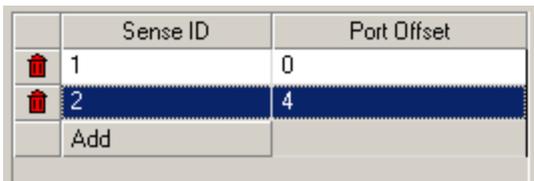
**Name** – The name of the CCS Record Server profile.

**Ports** – The number of ports to be configured.

**Single Recording (Trunks)** – enable this if you wish to combine “multiple” calls (because of transferred) on the same trunk into one recording file. This is applicable to trunk side recording.

**Hardware** – Sense must always be selected.

When there are multiple recording devices connected to the server, **Sense ID** and **Port Offset** must be configured. Assuming there are two analog recording devices, both with 4 ports, this is the correct ID and offset configuration.



	Sense ID	Port Offset
	1	0
	2	4
	Add	

**SENSE Server** – the address of the SENSE Server

**Report Server** – the URL of the Report Server

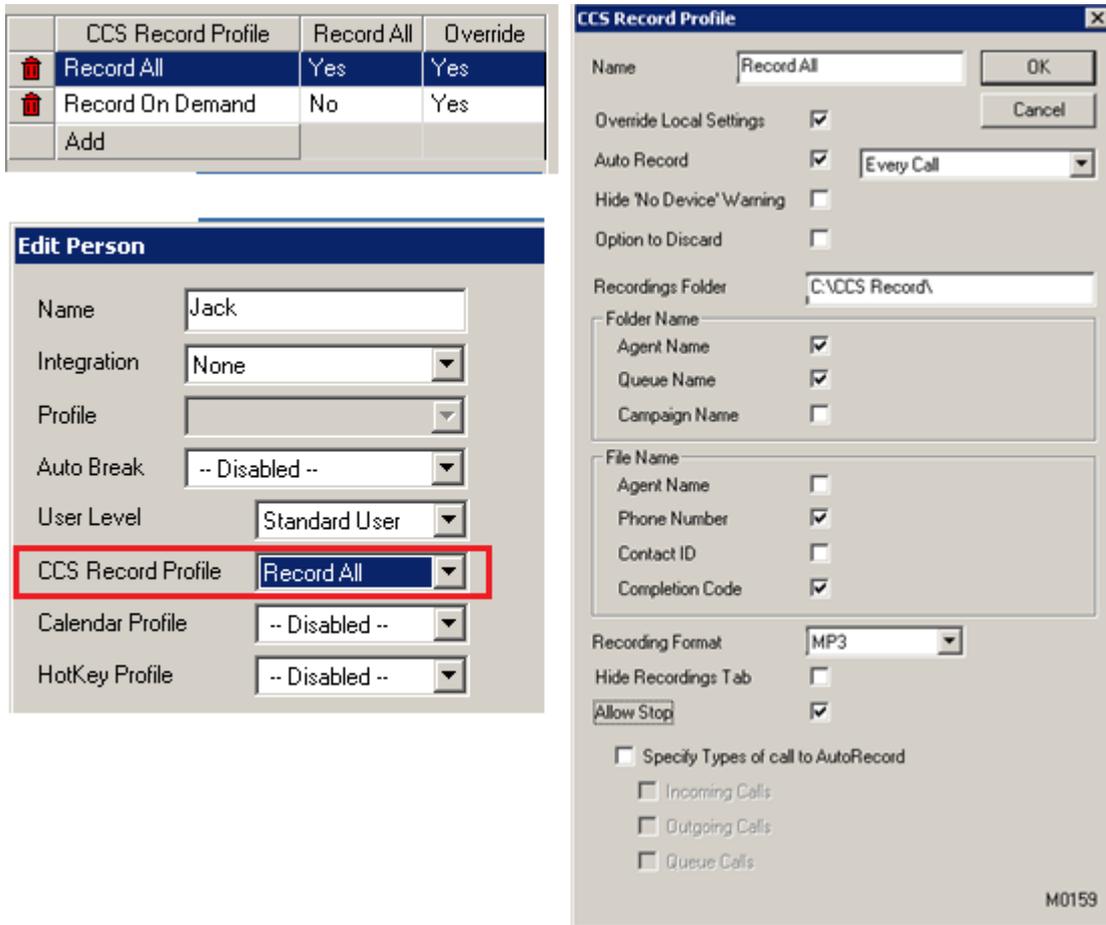
**Port / Connected Extension / All** – configuration of each port and whether they are connected to a trunk, and set to record all or follow the CCS Desk agent recording profile

When the ports are set to Record All:

- The recording files will saved into folders named by the extension number involved in the call.
- The recording filename will contain the date and time of the call, direction, and either dialed number or caller ID.

When the ports are NOT set to Record All:

- It will only record extensions that are being monitored by CCS Desk Client.
- The CCS Desk agent recording profile will control the recording path, the folder grouping and the filename of the recording file. The agent recording profile is configured at the CCS Record tab.

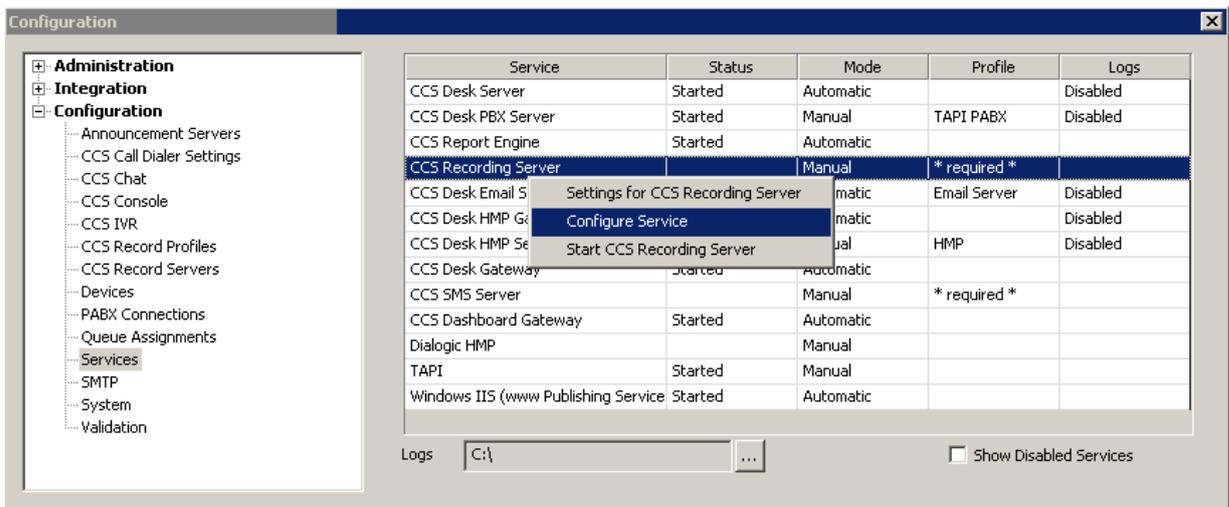


### 1.1.2.5 Activate CCS Record Server Service

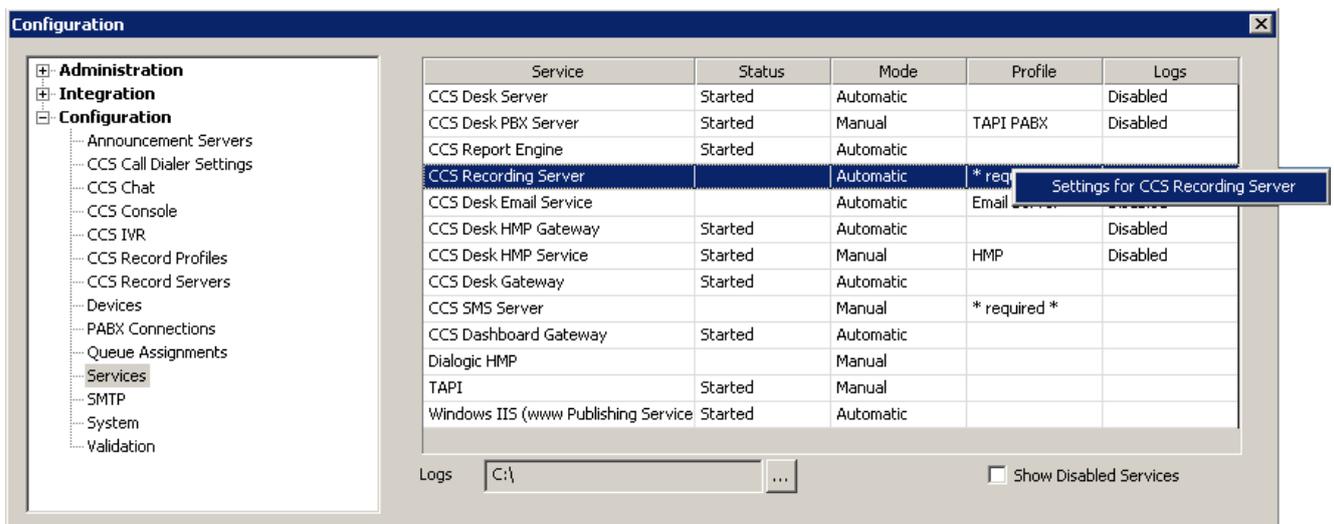
The recording service is included when CCS Desk is installed however it is not enabled by default.

Step 1 - To enable **CCS Recording Server** service → Launch **CCS Desk Manager** → Go to the **Services** tab → then **Show Disabled Services**.

Step 2 - **Right click** on CCS Recording Server → Select **Configure Service** → Click **Install**. Do not start the service at this stage.



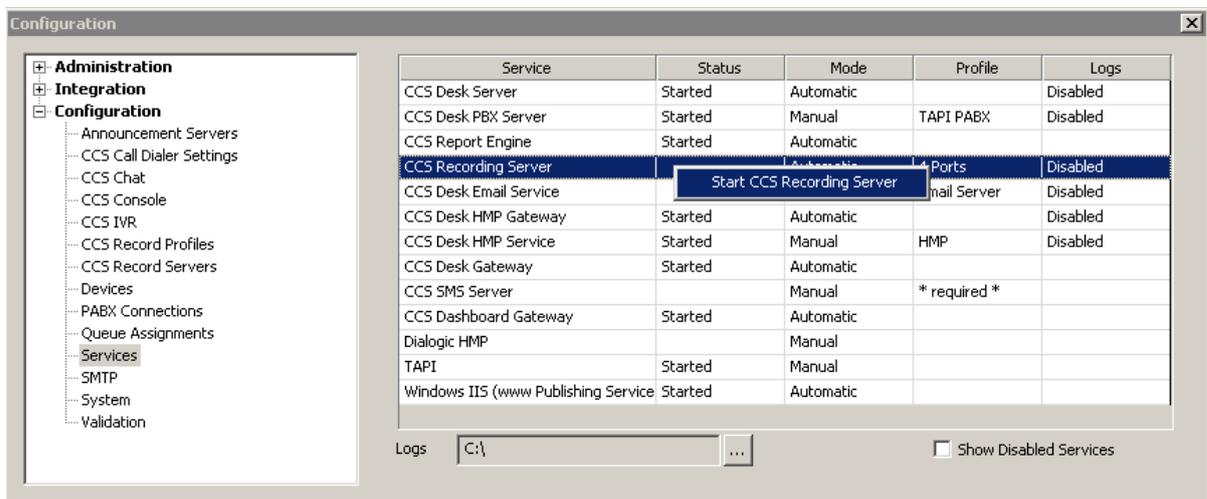
Step 3 – Right click on the Profile for CCS Recording Server. Select **Settings for CCS Recording Server**.



Step 4 – Select **CCS Recording Profile** that was previously created then click **OK**.



Step 5 - **Right click** on CCS Recording Server → Select **Start CCS Recording Server**.



**1.2 CCS Record with ISDN BRI Trunk**

The requirements for CCS Record are divided into two parts:

**1.2.1.1 System Requirements**

**1.2.1.2 Installation of CCS Desk and CCS Report**

**1.2.1 Pre-Installation Requirements**

**1.2.1.1 System Requirements**

The CCS Record Server must meet the following minimum specifications.

<b>CCS Record Recommended Hardware</b>				
<b>Install Scope</b>	<b>Up to 8 channels a maximum of 1,600 calls per day</b>	<b>Up to 30 channels and a maximum of 5,000 calls per day</b>	<b>Up to 120 channels and a maximum of 20,000 calls per day</b>	<b>Up to 600 channels and a maximum of 1,000,000 calls per day</b>
<b>Dedicated Server Required</b>	Yes	Yes	Yes	Yes
<b>Dedicated SQL Server Required</b>	No	No	No	No
<b>Virtual Server Possible</b>	No	No	No	No
<b>Operating System</b>	Windows 7 Professional or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2
<b>CPU</b>	I3 2120 3.3GHz	I3 2120 3.3GHz	I3 2120 3.3GHz	I3 2120 3.3GHz
<b>RAM</b>	2 GB	4 GB	8 GB	16 GB
<b>Disk Space</b>	500 GB	1 TB	1 TB	3 TB
<b>USB Port</b>	1 for each recording hardware	1 for each recording hardware	1 for each recording hardware	1 for each recording hardware

## 1.2.1.2 Installation of CCS Desk and CCS Report

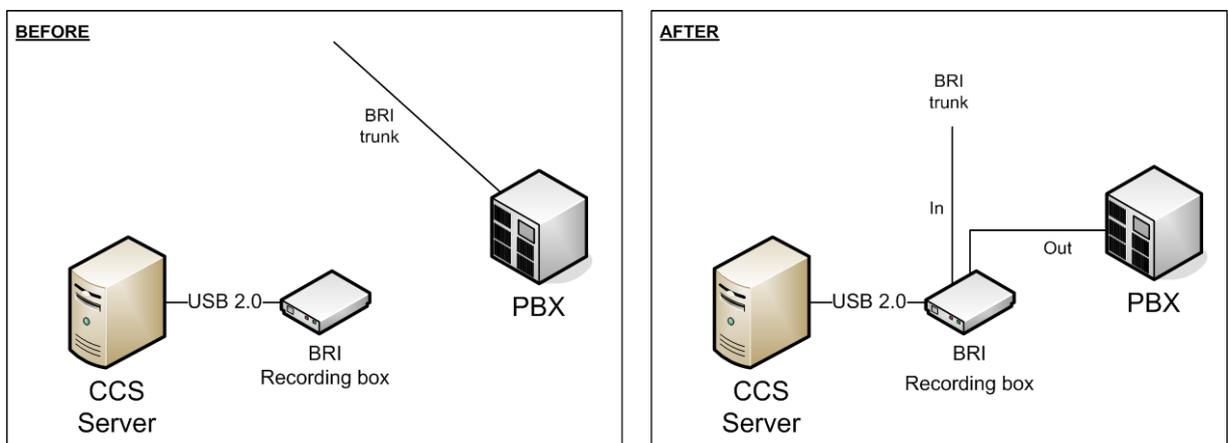
Before CCS Call can be configured, the installation of CCS Report and CCS Desk must be completed. Please consult Section 2 and Section 3 for more information.

## 1.2.2 Installation

### 1.2.2.1 Connect the ISDN BRI Trunk

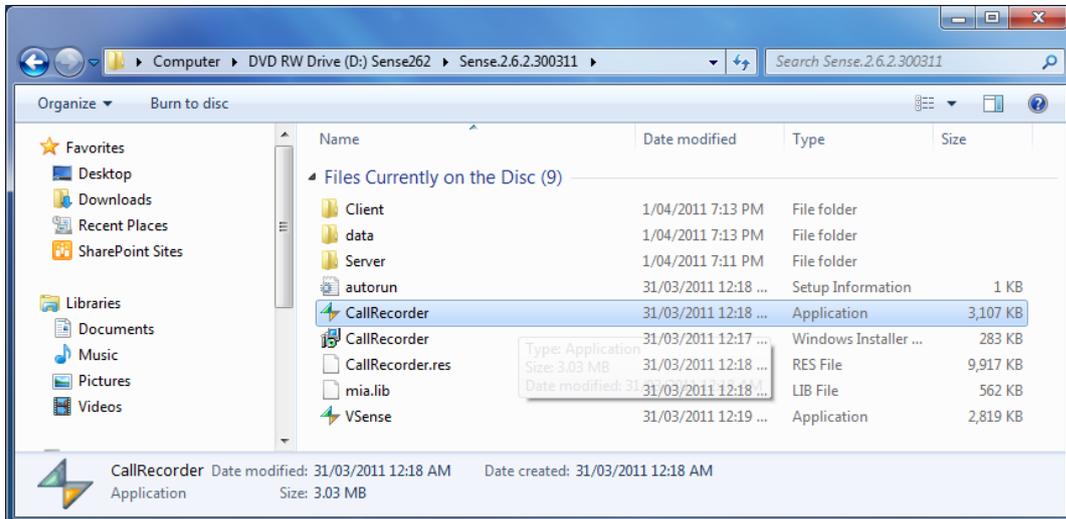


From the ISDN NT unit, the BRI line must first be connected to the IN ports of the recording box. The OUT ports on the recording box will then be connected to the PBX as illustrated with the diagram below. Standard network cables are used for both connections.



### 1.2.2.2 Install Call Recorder

Step 1 - Browse to the recording box software DVD → Run the **CallRecorder.exe**



Step 2 - You will be prompted to **install any prerequisites** that may be required (Service Packs, SQL Express) → Select **Yes** to install.

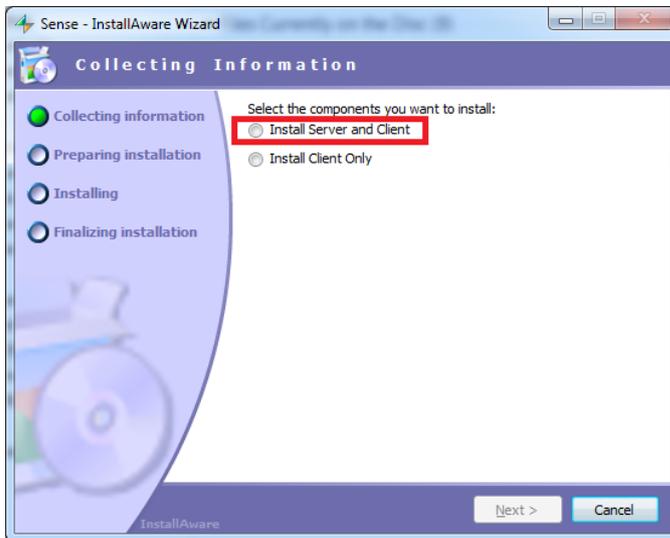
Step 3 - If you are prompted to **reboot** → Select **Yes**.

Once you log back in, the installation will continue where it left off.

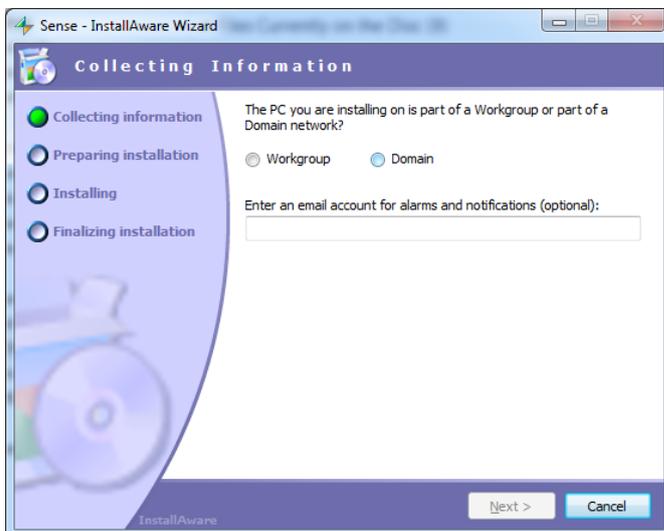
Step 4 - The installer will also recommend that you **connect the recording box** to the Server via USB port and ignore/cancel the 'Found new hardware' wizard.

→ Connect the **hardware** → Click **Next**.

Step 5 - When presented with the option → Select **Install Server and Client** → Click **Next**.



Step 6 - Depending on the **network configuration** → Specify **workgroup** or **domain** → You will also need to enter an **email address** for notifications → Click **Next**.



Step 7 - **Read and Agree to the license agreement** → Click **Next**.

Step 8 - You will need to specify the **path details** → Click **Next**.

**Application Files** – Defaults to C:\Program Files\Retell\Sense

**Data Folder (Temporary Storage)** – Defaults to the Application Folder

**Audio Storage Folder** – Defaults to the Application Folder

**Backup Folder**

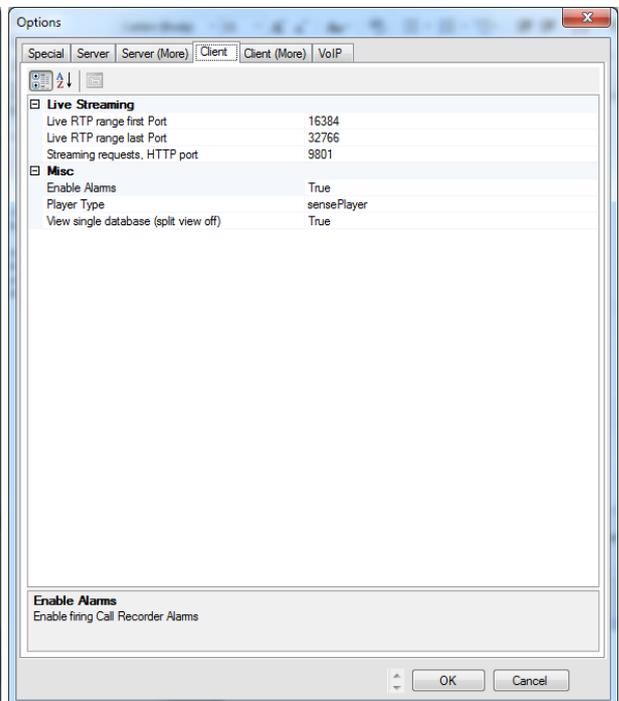
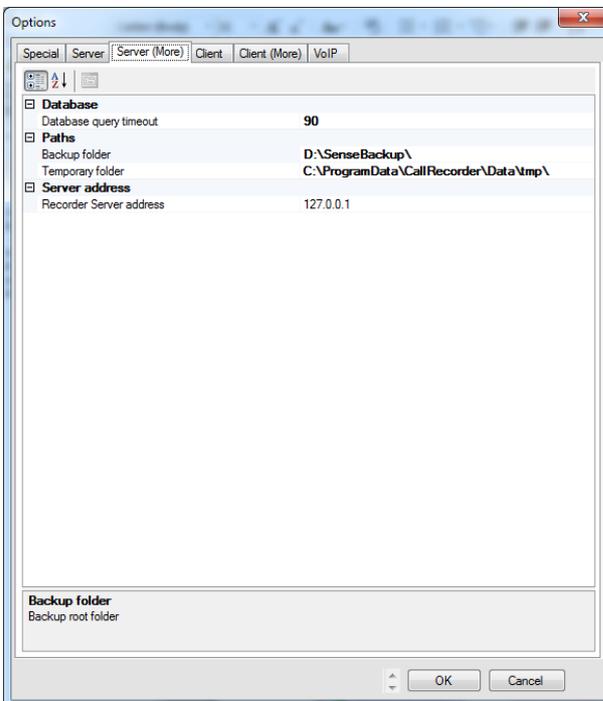
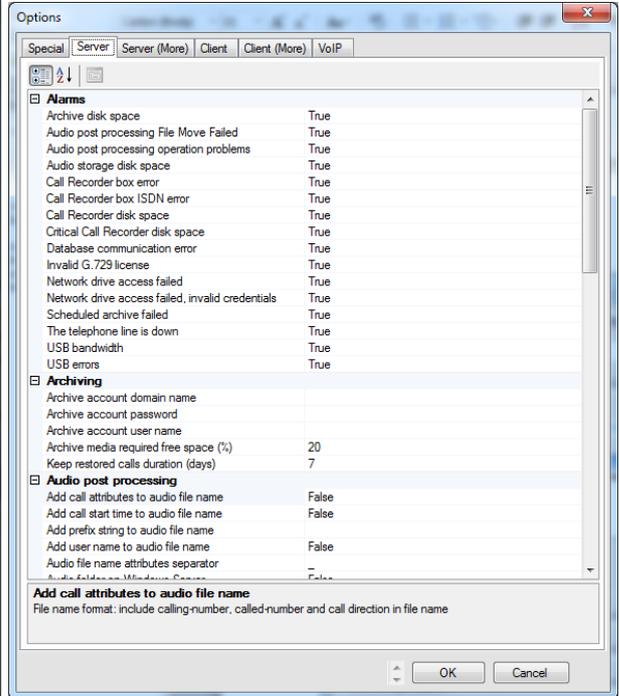
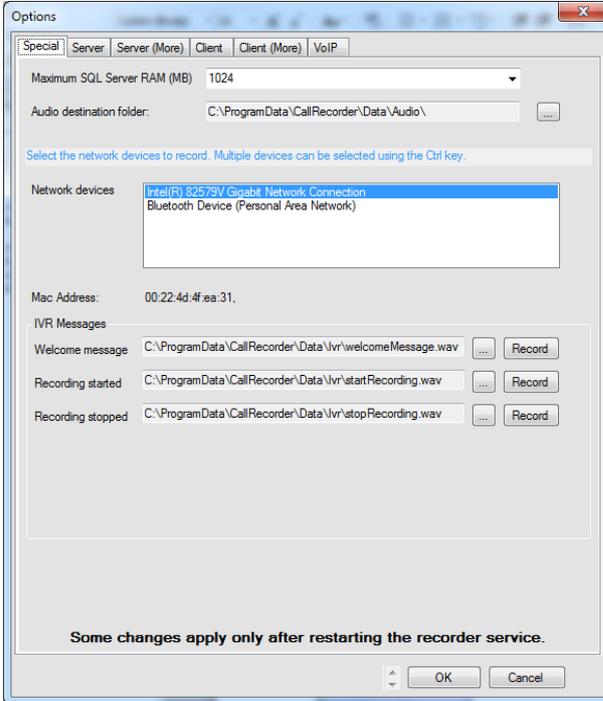
**SQL Root Folder** – Defaults to C:\Program Files\Microsoft SQL Server

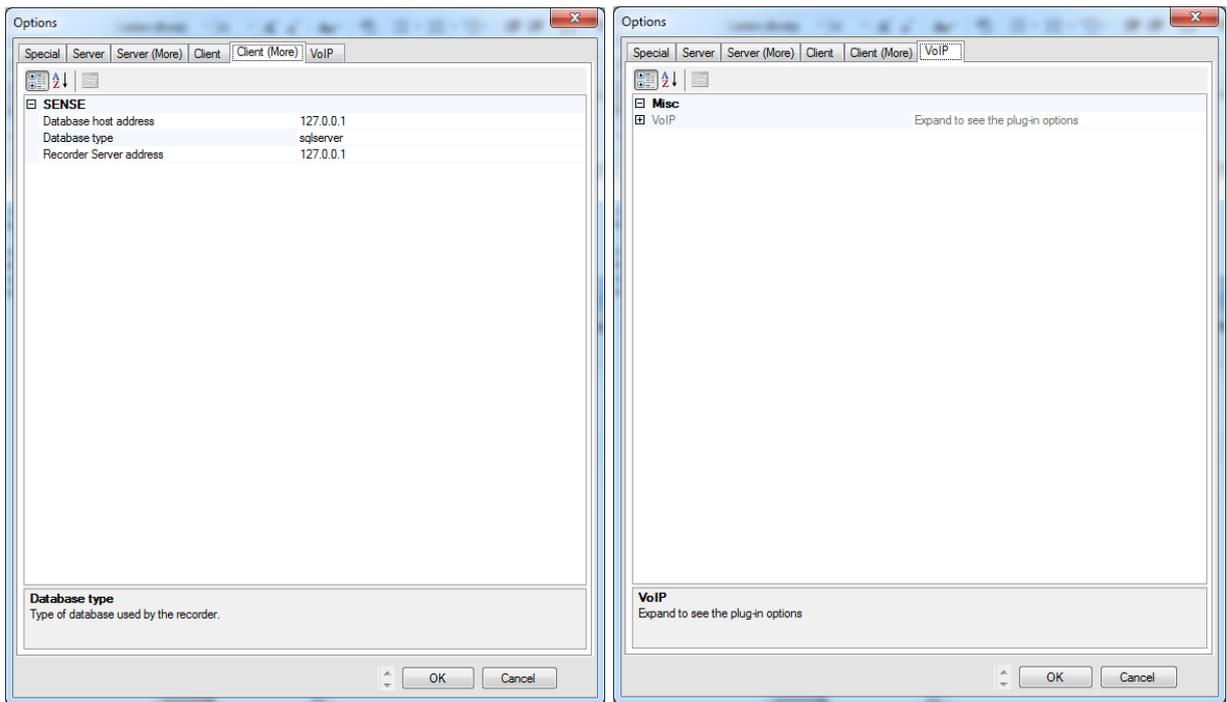
**Client Location** – Default to C:\Program Files\Retell\Sense Calls

Step 9 - The installer will detect and **install the device drivers**.



Step 10 - The post configuration screens will be displayed to review → No changes are required.

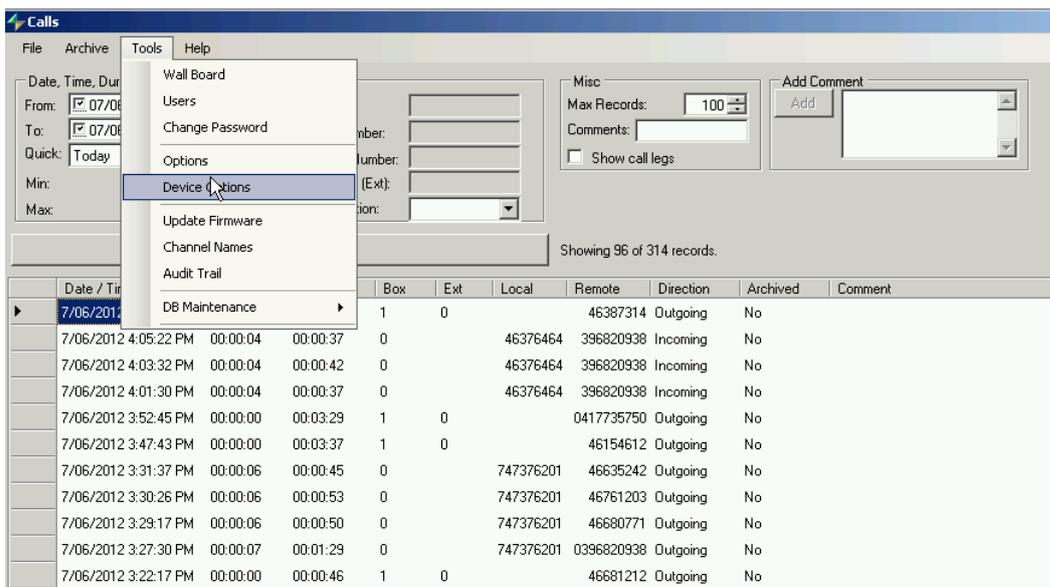




Step 10 - If you want to test **Sense** that calls are being received or to change configuration options → Open **Calls** from the shortcut place on the **Desktop**.

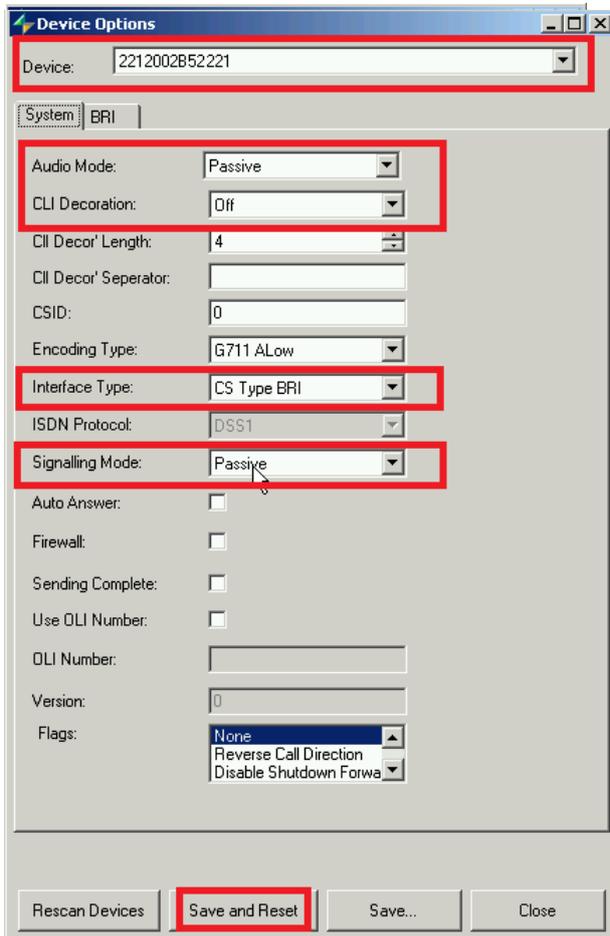
The username is **admin**.

The password is **callrecorder**.



## Note

If after placing tests calls this does not show up, you will need to check **Tools → Device Options**.



Typical configuration for Analog Trunk:

**Audio Mode = Passive**

**CLI Decoration = Off**

**Interface Type = CS Type BRI**

**Signalling Mode = Passive**

Ensure you **Save and Reset** when finished making changes.

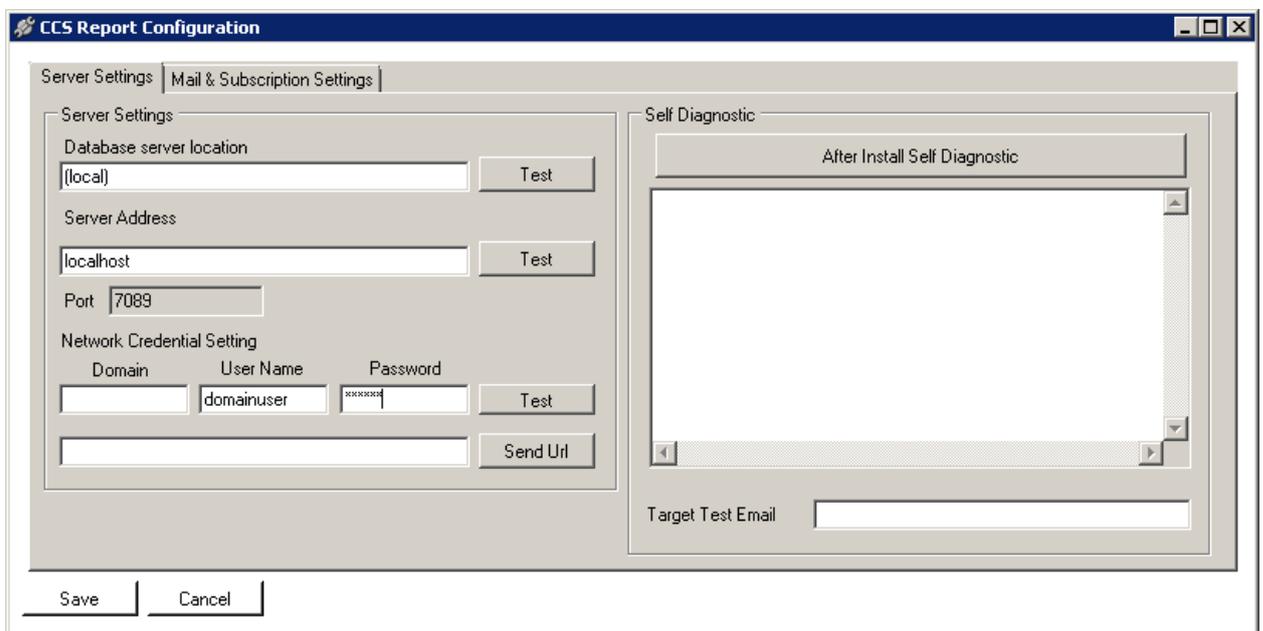
If there are multiple devices connected to the server, change the selected **Device** to configure the other hardware.

### 1.2.2.3 Configure CCS Report

To link the reports with the recorded audio files, a few things must be configured properly.

Step 1 - CCS Report connection type **MUST** be configured to **CTI**. This can be configured during the installation Config Wizard, or by using CCS Report Manager.

Step 2 - CCS Report Config **MUST** contain a valid network credentials, otherwise access to recordings will require a username and password each time.



Step 3 - If the CCS Record service and recording hardware is installed on a different machine to CCS Report, the **Web.config** file located in the **CCSReportWebGUI** installation folder needs to be adjusted to reflect the location of the Sense installation.

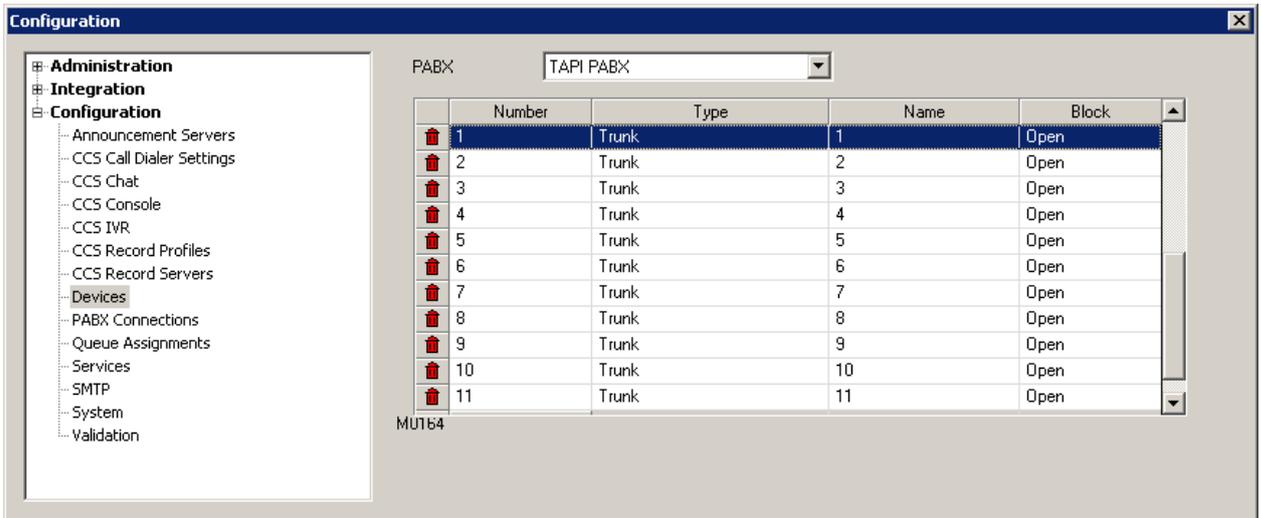
Open the **Web.config** file with Notepad (Right Click → Open With... → Notepad)

→ Search for the line below and set the 'value' with the machine name or IP address of the Sense machine.

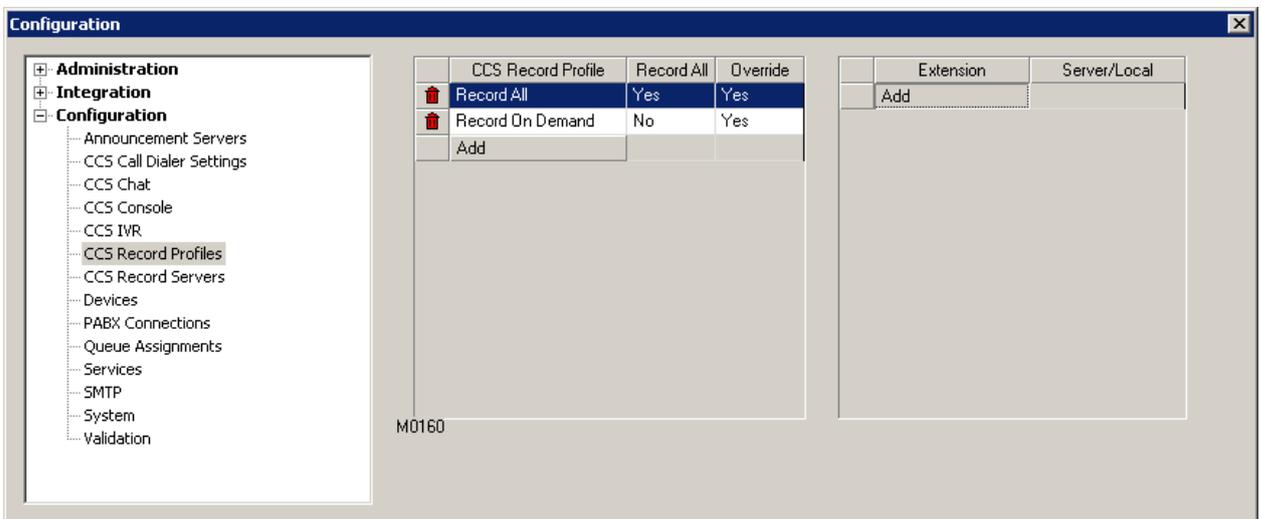
```
<add key="SenseServer" value="localhost"/>
```

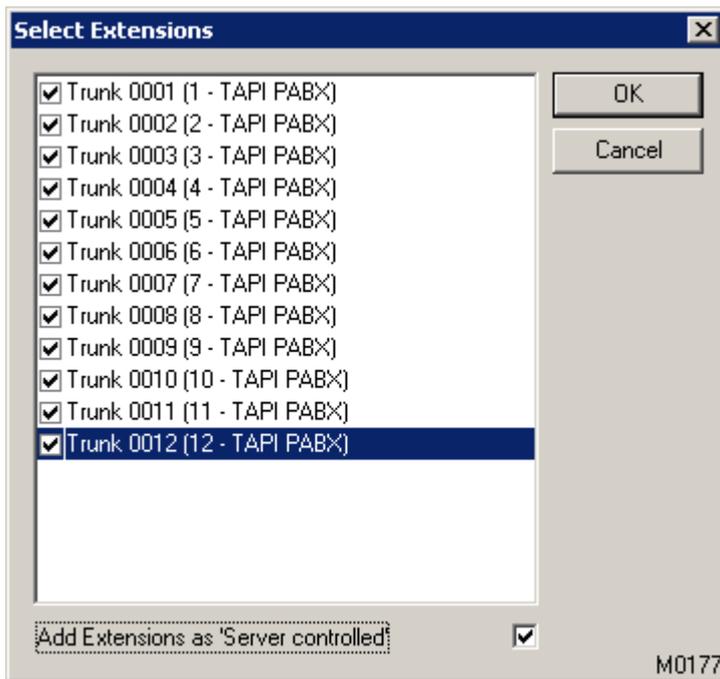
## 1.2.2.4 Configure CCS Desk

Step 1 - Run **CCS Desk Manager** → Go to the **Devices** tab → **add the analog trunks** to the **Devices** list.

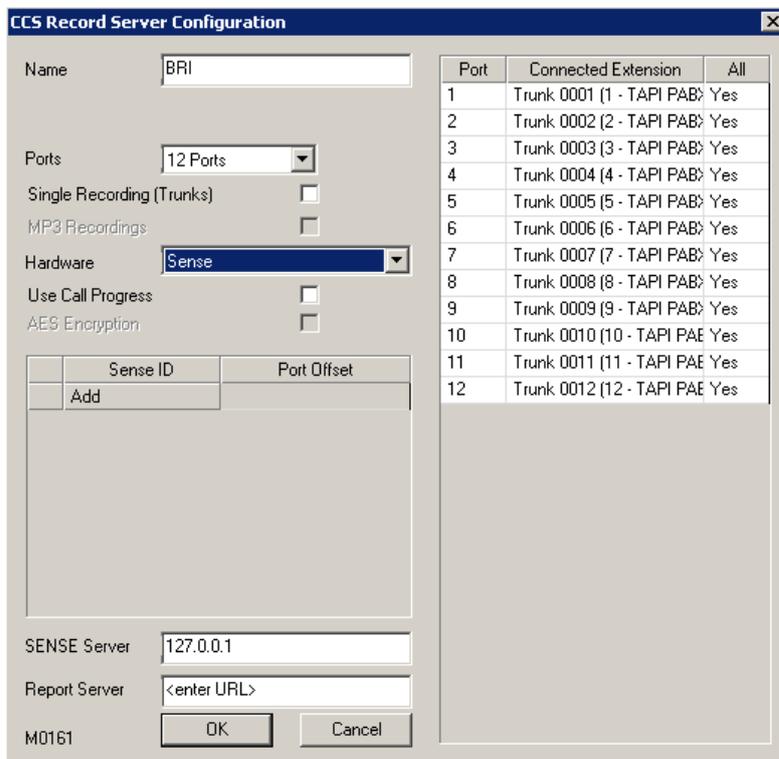


Step 2 - Go to the **CCS Record** tab → add the **trunks** as **Server Controlled** devices.





Step 3 - Go to the **CCS Record Server** → **Create a recording configuration profile** → **Map the trunks into the ports.**



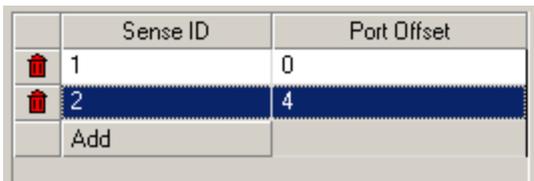
**Name** – The name of the CCS Record Server profile.

**Ports** – The number of ports to be configured.

**Single Recording (Trunks)** – enable this if you wish to combine “multiple” calls (because of transferred) on the same trunk into one recording file. This is applicable to trunk side recording.

**Hardware** – Sense must always be selected.

When there are multiple recording devices connected to the server, **Sense ID** and **Port Offset** must be configured. Assuming there are two analog recording devices, both with 4 ports, this is the correct ID and offset configuration.



	Sense ID	Port Offset
	1	0
	2	4
	Add	

**SENSE Server** – the address of the SENSE Server

**Report Server** – the URL of the Report Server

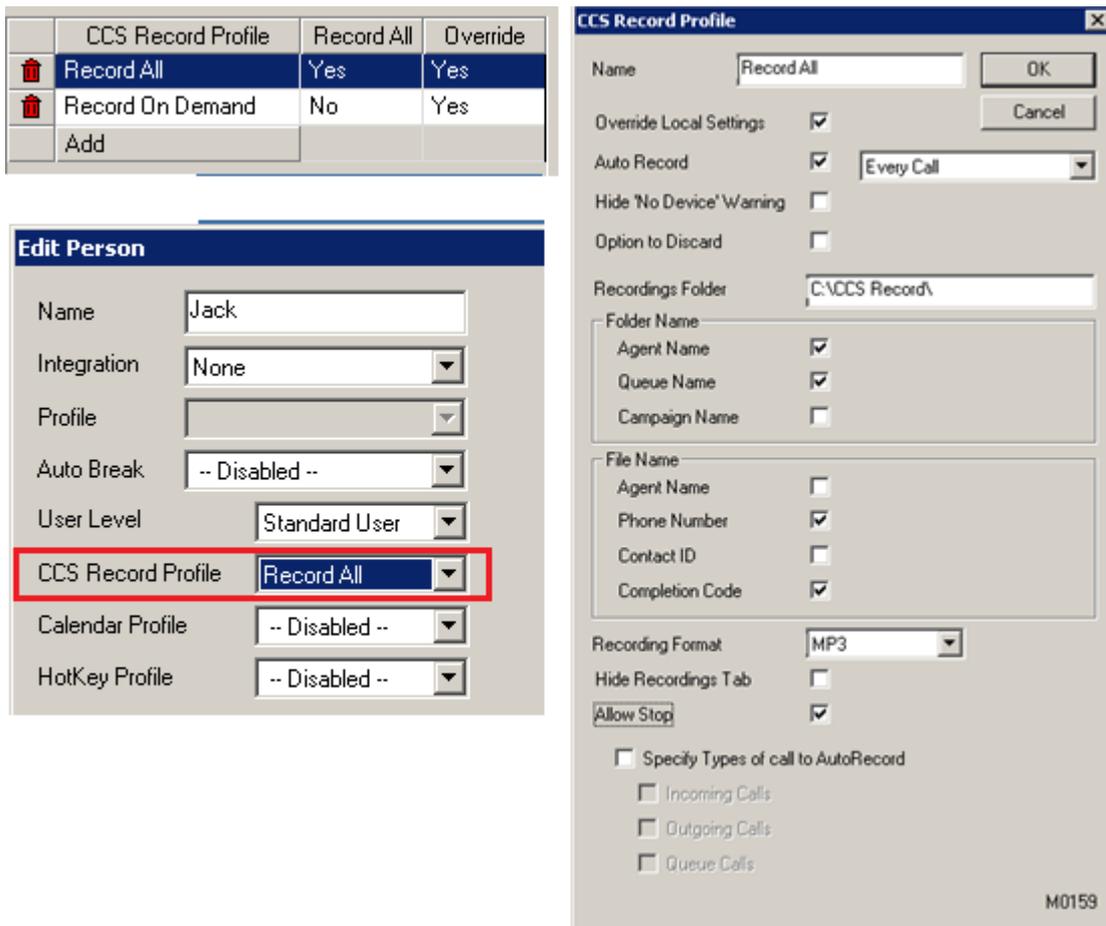
**Port / Connected Extension / All** – configuration of each port and whether they are connected to a trunk, and set to record all or follow the CCS Desk agent recording profile.

When the ports are set to Record All:

- The recording files will saved into folders named by the extension number involved in the call.
- The recording filename will contain the date and time of the call, direction, and either dialed number or caller ID.

When the ports are NOT set to Record All:

- It will only record extensions that are being monitored by CCS Desk Client.
- The CCS Desk agent recording profile will control the recording path, the folder grouping and the filename of the recording file. The agent recording profile is configured at the CCS Record tab.

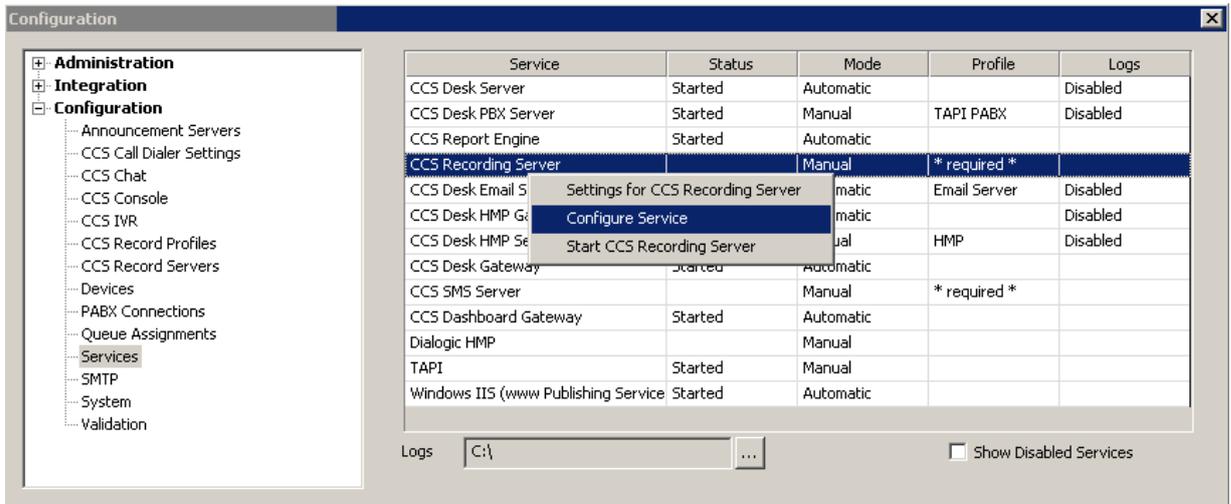


### 1.2.2.5 Activate CCS Record Server Service

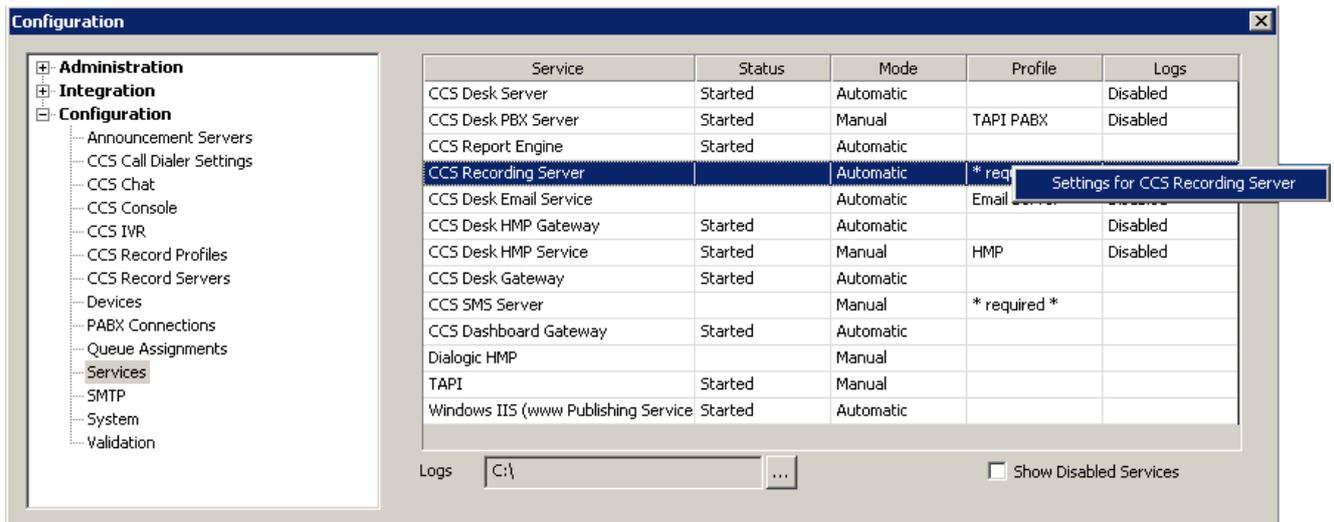
The recording service is included when CCS Desk is installed however it is not enabled by default.

Step 1 - To enable **CCS Recording Server** service → Launch **CCS Desk Manager** → Go to the **Services** tab → then **Show Disabled Services**.

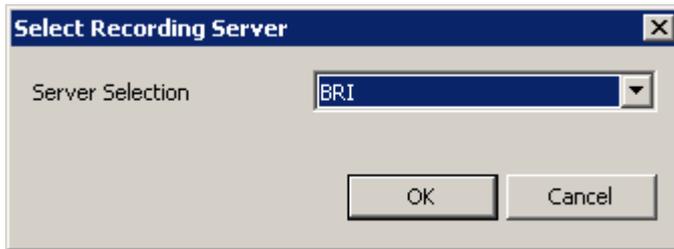
Step 2 - **Right click** on CCS Recording Server → Select **Configure Service** → Click **Install**. Do not start the service at this stage.



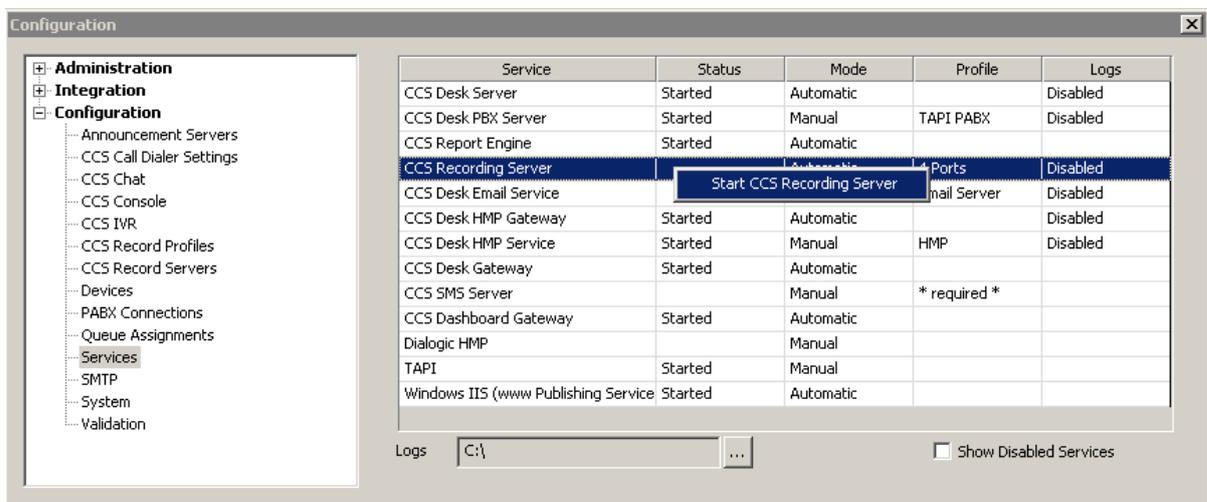
Step 3 – Right click on the Profile for CCS Recording Server. Select **Settings for CCS Recording Server**.



Step 4 – Select **CCS Recording Profile** that was previously created then click **OK**.



Step 5 - **Right click** on CCS Recording Server → Select **Start CCS Recording Server**.



**1.3 CCS Record with ISDN PRI Trunk**

The requirements for CCS Record are divided into two parts:

**9.3.1.1 System Requirements**

**9.3.1.2 Installation of CCS Desk and CCS Report**

**1.3.1 Pre-Installation Requirements**

**1.3.1.1 System Requirements**

The CCS Record Server must meet the following minimum specifications.

<b>CCS Record Recommended Hardware</b>				
<b>Install Scope</b>	<b>Up to 8 channels a maximum of 1,600 calls per day</b>	<b>Up to 30 channels and a maximum of 5,000 calls per day</b>	<b>Up to 120 channels and a maximum of 20,000 calls per day</b>	<b>Up to 600 channels and a maximum of 1,000,000 calls per day</b>
<b>Dedicated Server Required</b>	Yes	Yes	Yes	Yes
<b>Dedicated SQL Server Required</b>	No	No	No	No
<b>Virtual Server Possible</b>	No	No	No	No
<b>Operating System</b>	Windows 7 Professional or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2
<b>CPU</b>	I3 2120 3.3GHz	I3 2120 3.3GHz	I3 2120 3.3GHz	I3 2120 3.3GHz
<b>RAM</b>	2 GB	4 GB	8 GB	16 GB
<b>Disk Space</b>	500 GB	1 TB	1 TB	3 TB
<b>USB Port</b>	1 for each recording hardware	1 for each recording hardware	1 for each recording hardware	1 for each recording hardware

### 1.3.1.2 Installation of CCS Desk and CCS Report

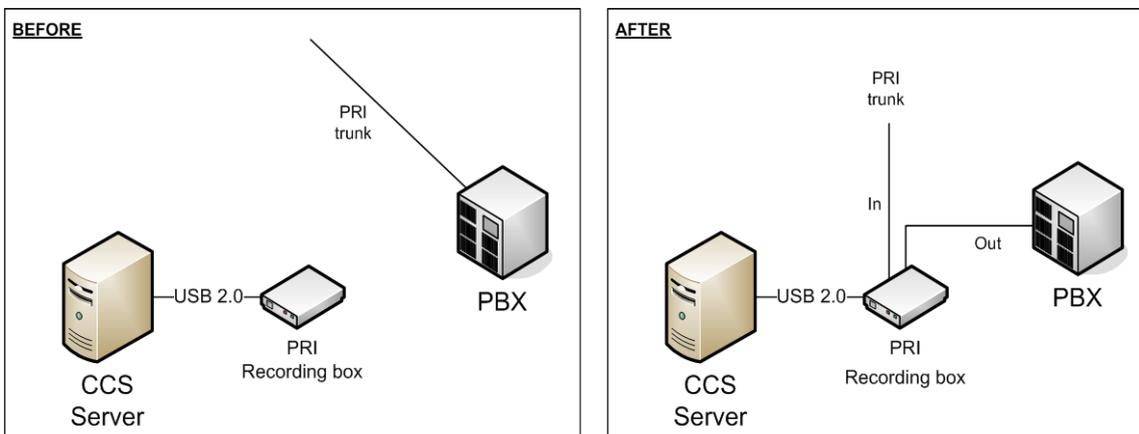
Before CCS Call can be configured, the installation of CCS Report and CCS Desk must be completed. Please consult Section 2 and Section 3 for more information.

## 1.3.2 Installation

### 1.3.2.1 Connect the ISDN PRI Trunk

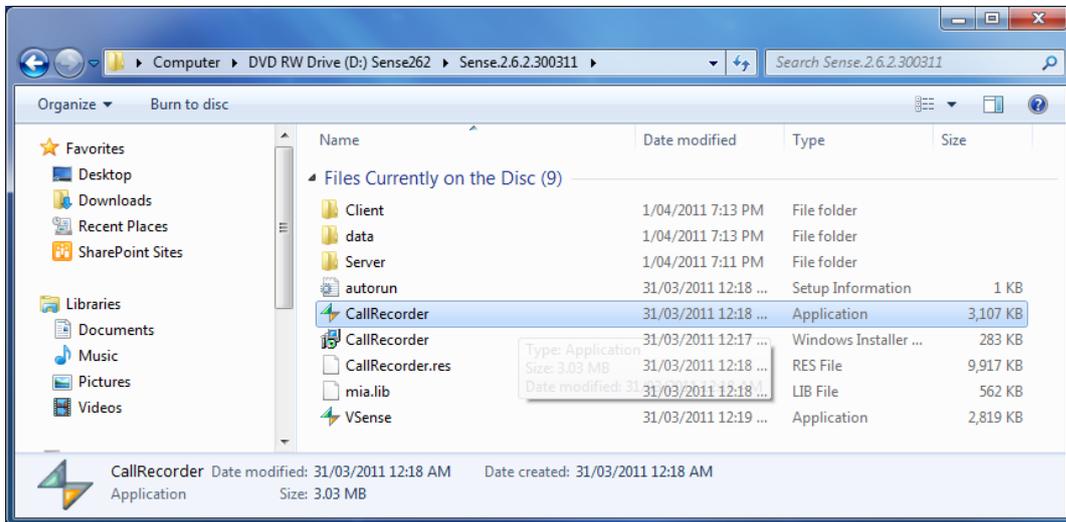


From the ISDN NT unit, the PRI line must first be connected to the PRI IN port of the recording box. The PRI OUT port on the recording box will then be connected to the PBX as illustrated with the diagram below. Standard network cables are used for both connections.



## 1.3.2.2 Install Call Recorder

Step 1 - Browse to the recording box software DVD → Run the **CallRecorder.exe**



Step 2 - You will be prompted to **install any prerequisites** that may be required (Service Packs, SQL Express) → Select **Yes** to install.

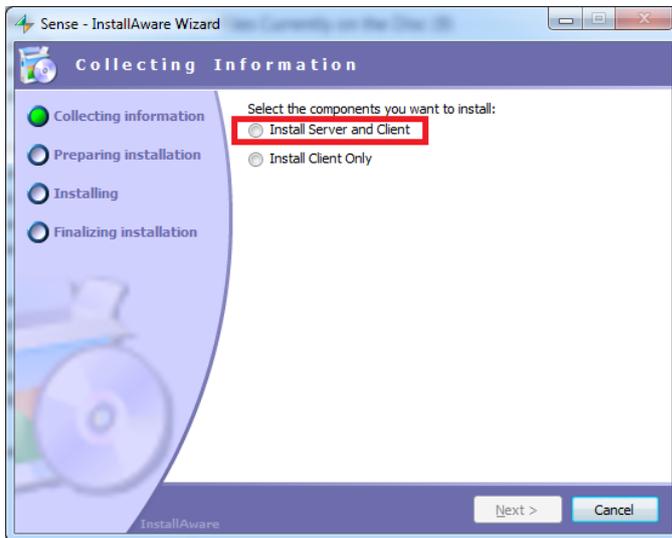
Step 3 - If you are prompted to **reboot** → Select **Yes**.

Once you log back in, the installation will continue where it left off.

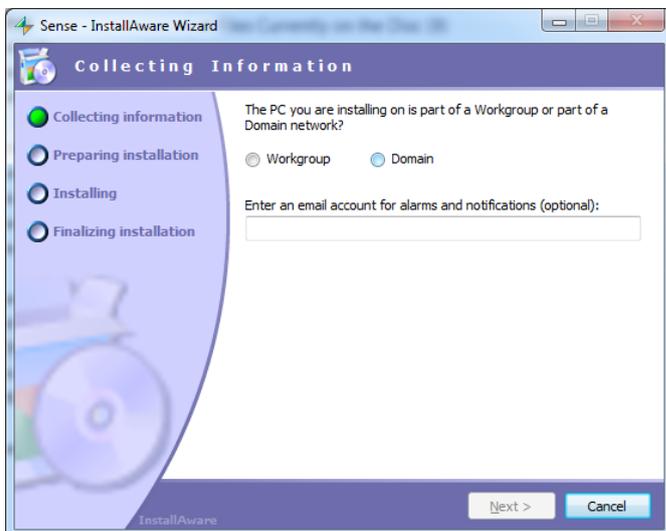
Step 4 - The installer will also recommend that you **connect the recording box** to the Server via USB port and ignore/cancel the 'Found new hardware' wizard.

→ Connect the **hardware** → Click **Next**.

Step 5 - When presented with the option → Select **Install Server and Client** → Click **Next**.



Step 6 - Depending on the **network configuration** → Specify **workgroup** or **domain** → You will also need to enter an **email address** for notifications → Click **Next**.



Step 7 - **Read and Agree to the license agreement** → Click **Next**.

Step 8 - You will need to specify the **path details** → Click **Next**.

**Application Files** – Defaults to C:\Program Files\Retell\Sense

**Data Folder (Temporary Storage)** – Defaults to the Application Folder

**Audio Storage Folder** – Defaults to the Application Folder

**Backup Folder**

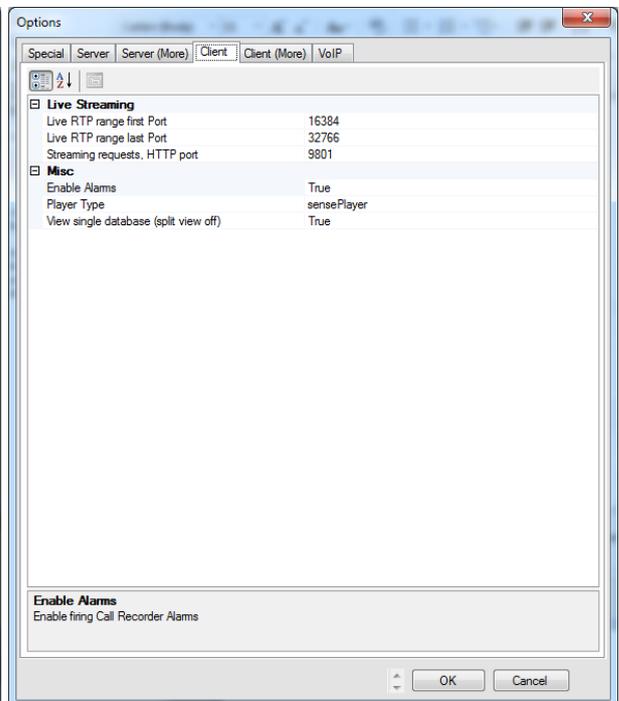
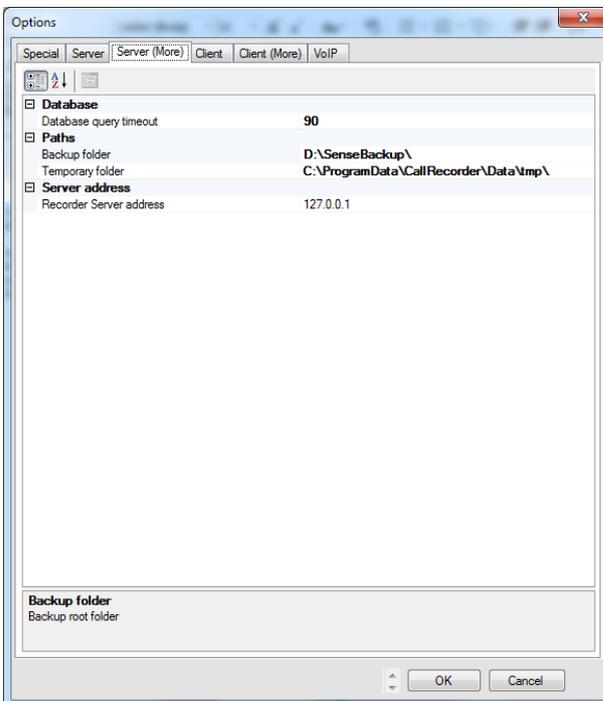
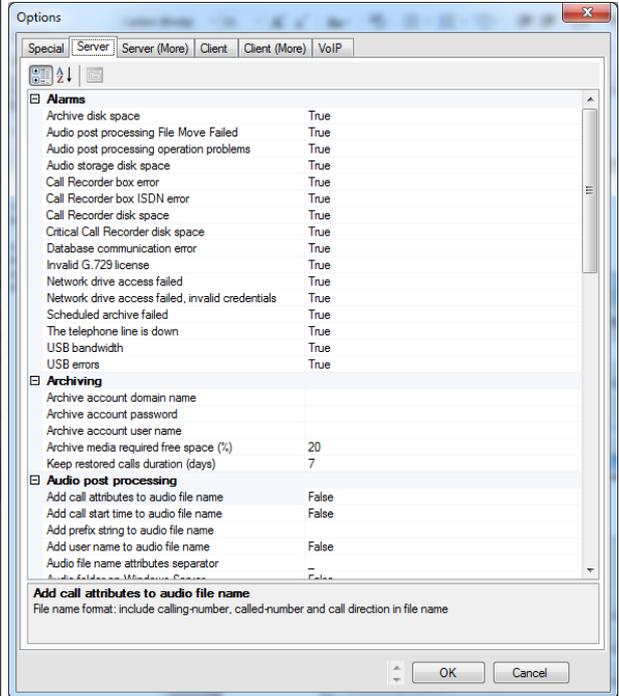
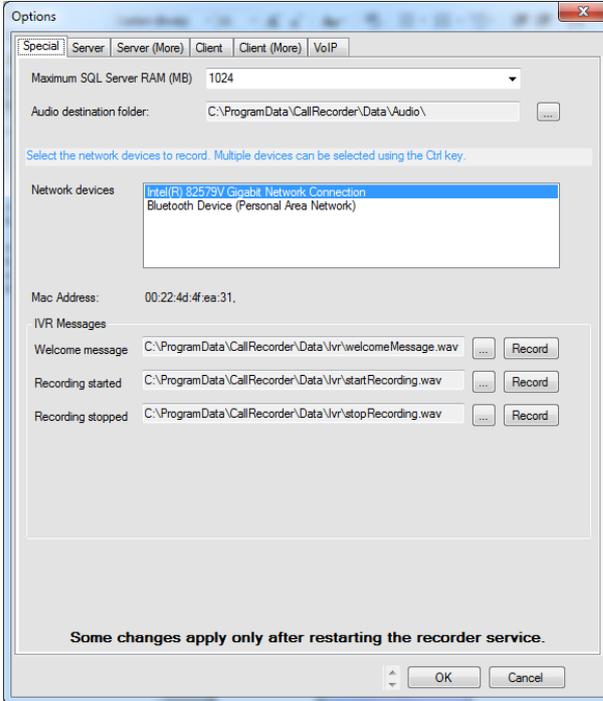
**SQL Root Folder** – Defaults to C:\Program Files\Microsoft SQL Server

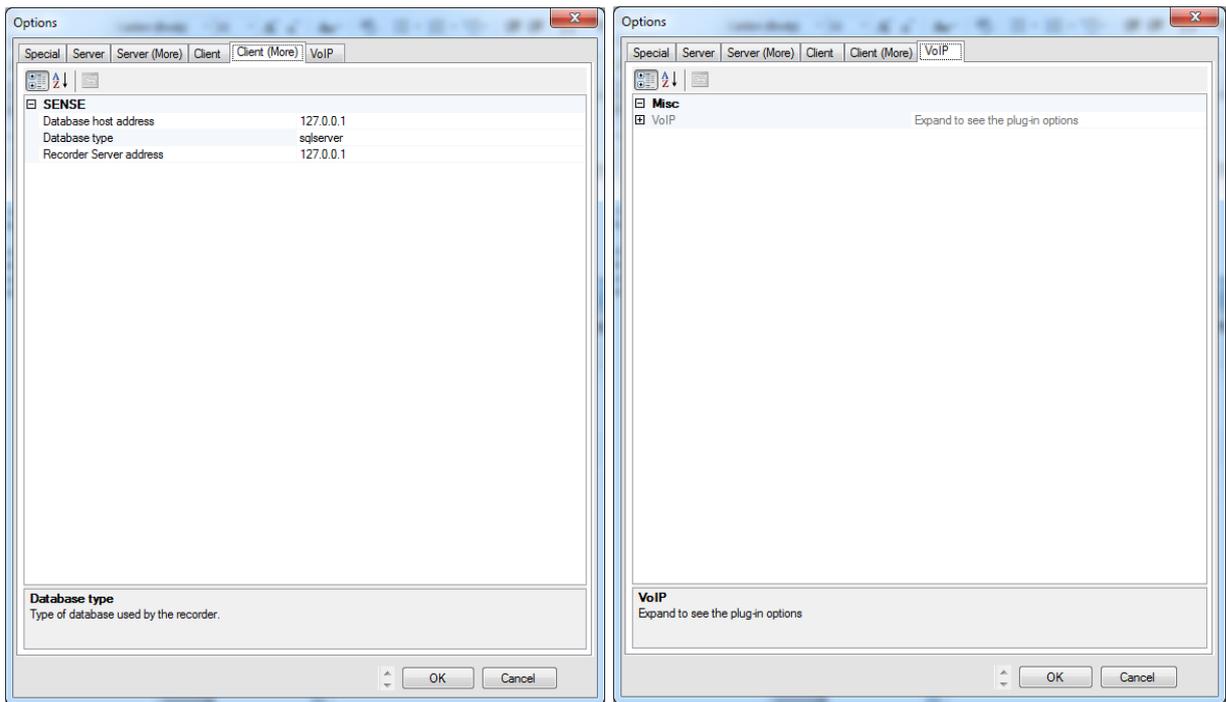
**Client Location** – Default to C:\Program Files\Retell\Sense Calls

Step 9 - The installer will detect and **install the device drivers**.



Step 10 - The post configuration screens will be displayed to review → No changes are required.

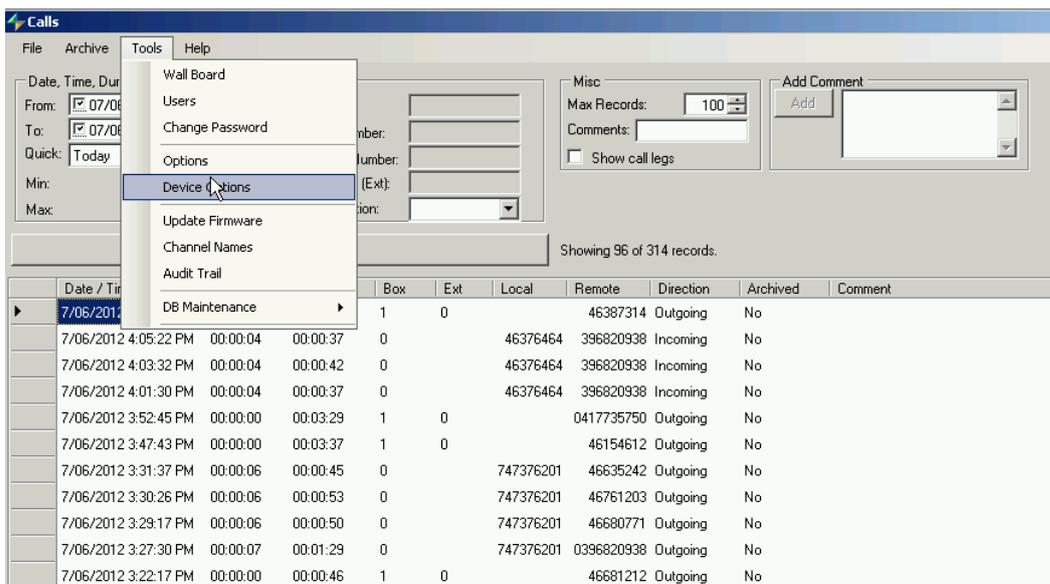




Step 10 - If you want to test **Sense** that calls are being received or to change configuration options → Open **Calls** from the shortcut place on the **Desktop**.

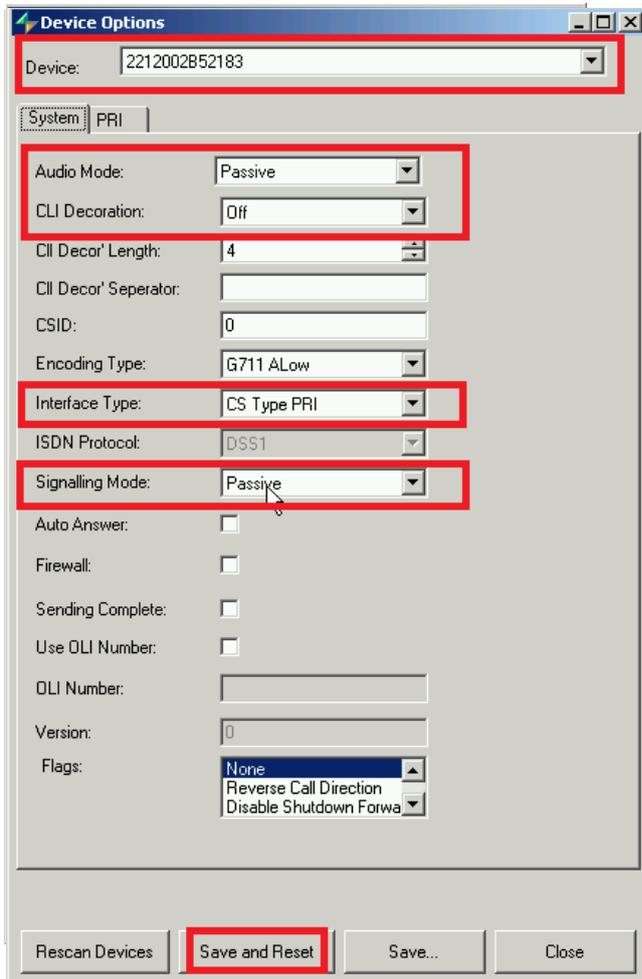
The username is **admin**.

The password is **callrecorder**.



## Note

If after placing tests calls this does not show up, you will need to check **Tools → Device Options**.



Typical configuration for Analog Trunk:

**Audio Mode = Passive**

**CLI Decoration = Off**

**Interface Type = CS Type PRI**

**Signalling Mode = Passive**

Ensure you **Save and Reset** when finished making changes.

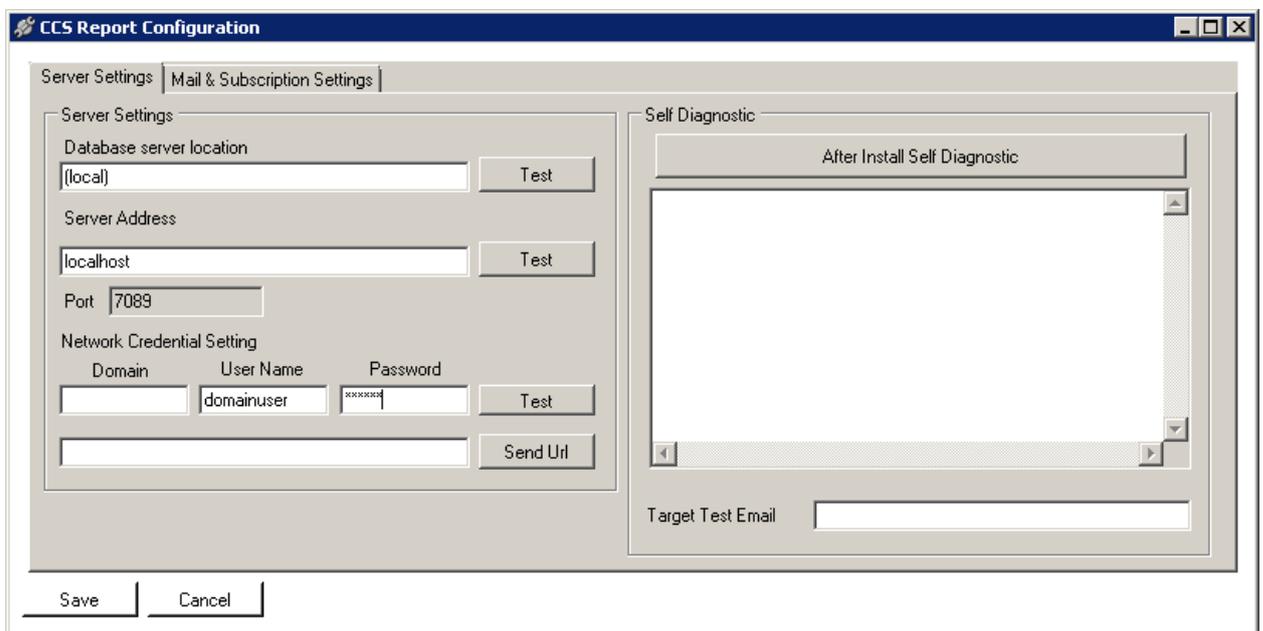
If there are multiple devices connected to the server, change the selected **Device** to configure the other hardware.

### 1.3.2.3 Configure CCS Report

To link the reports with the recorded audio files, a few things must be configured properly.

Step 1 - CCS Report connection type **MUST** be configured to **CTI**. This can be configured during the installation Config Wizard, or by using CCS Report Manager.

Step 2 - CCS Report Config **MUST** contain a valid network credentials, otherwise access to recordings will require a username and password each time.



Step 3 - If the CCS Record service and recording hardware is installed on a different machine to CCS Report, the **Web.config** file located in the **CCSReportWebGUI** installation folder needs to be adjusted to reflect the location of the Sense installation.

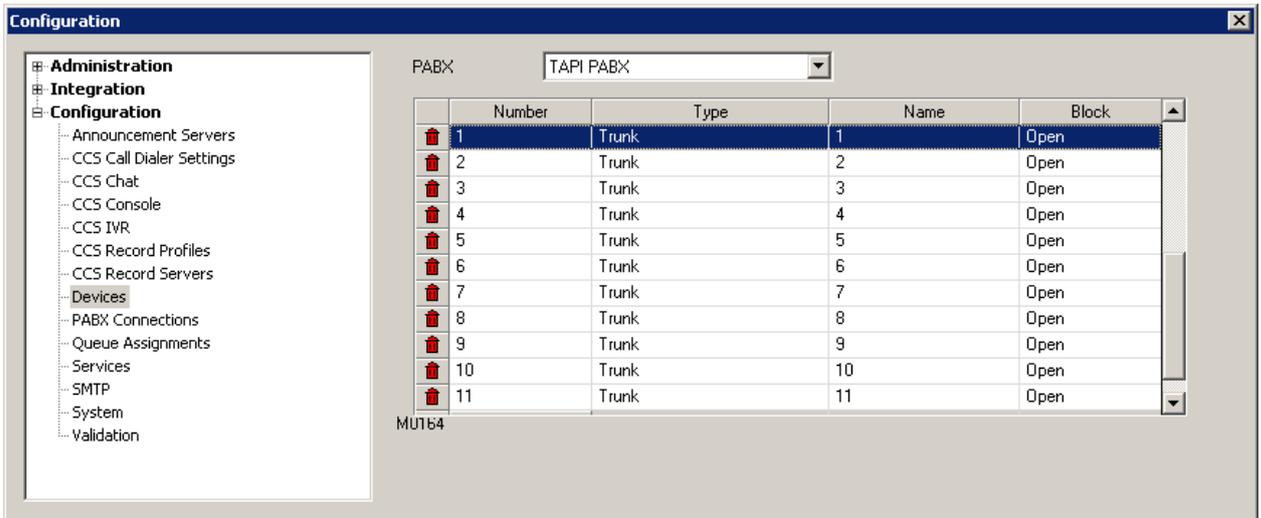
Open the **Web.config** file with Notepad (Right Click → Open With... → Notepad)

→ Search for the line below and set the 'value' with the machine name or IP address of the Sense machine.

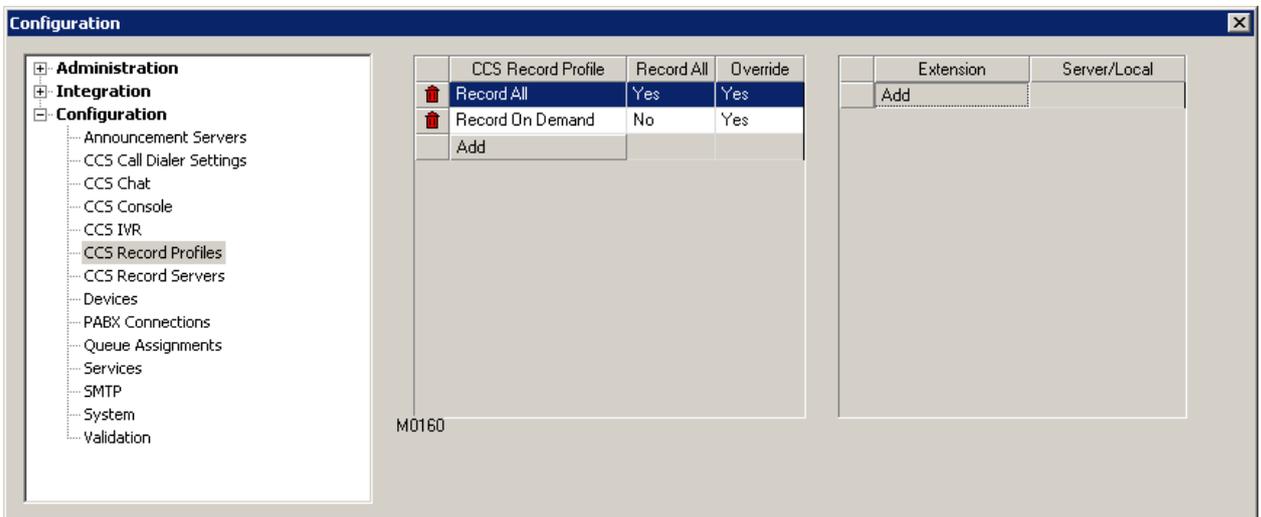
```
<add key="SenseServer" value="localhost"/>
```

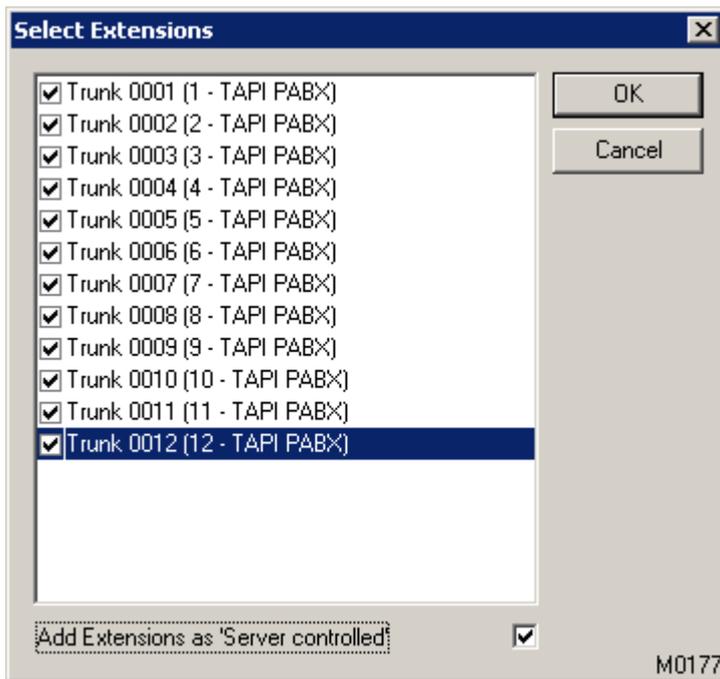
### 1.3.2.4 Configure CCS Desk

Step 1 - Run **CCS Desk Manager** → Go to the **Devices** tab → add the **ISDN PRI trunks** to the **Devices** list.

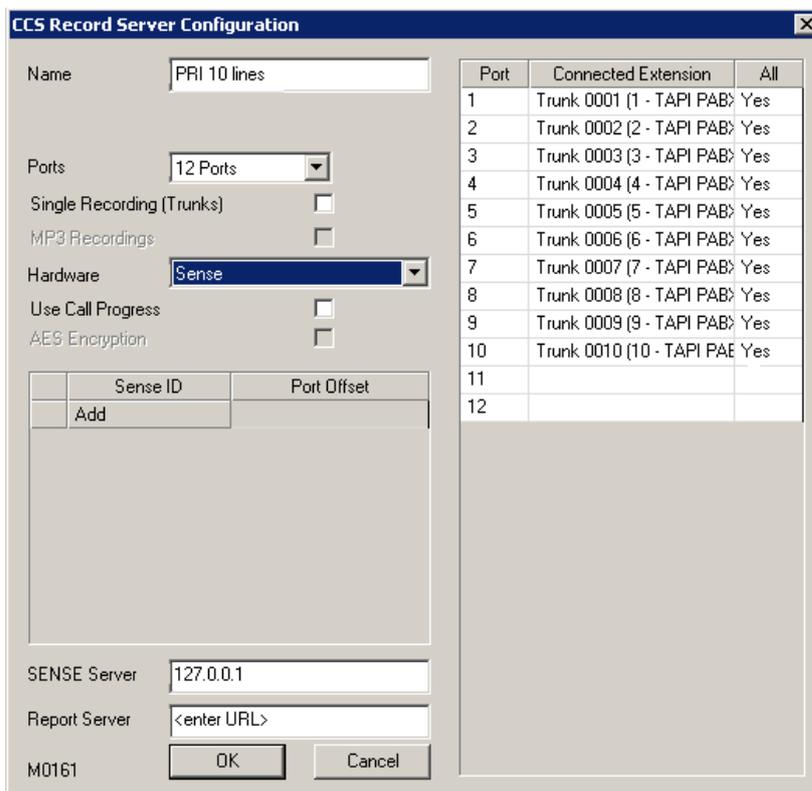


Step 2 - Go to the **CCS Record** tab → add the **trunks** as **Server Controlled** devices.





Step 3 - Go to the **CCS Record Server** → **Create a recording configuration profile** → **Map the trunks into the ports.**



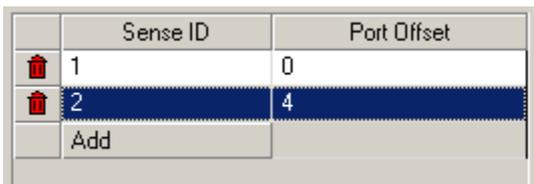
**Name** – The name of the CCS Record Server profile.

**Ports** – The number of ports to be configured.

**Single Recording (Trunks)** – enable this if you wish to combine “multiple” calls (because of transferred) on the same trunk into one recording file. This is applicable to trunk side recording.

**Hardware** – Sense must always be selected.

When there are multiple recording devices connected to the server, **Sense ID** and **Port Offset** must be configured. Assuming there are two analog recording devices, both with 4 ports, this is the correct ID and offset configuration.



	Sense ID	Port Offset
	1	0
	2	4
Add		

**SENSE Server** – the address of the SENSE Server

**Report Server** – the URL of the Report Server

**Port / Connected Extension / All** – configuration of each port and whether they are connected to a trunk, and set to record all or follow the CCS Desk agent recording profile

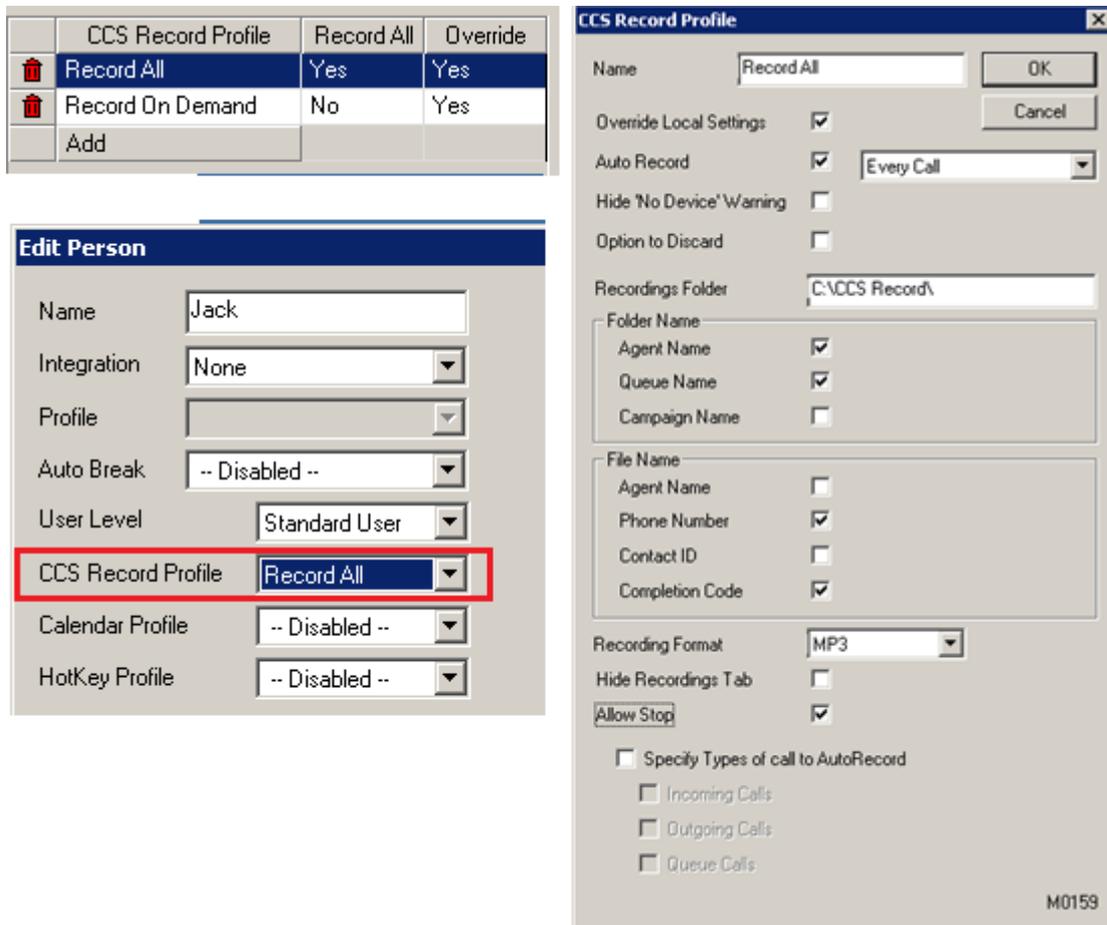
When the ports are set to Record All:

- The recording files will be saved into folders named by the extension number involved in the call.
- The recording filename will contain the date and time of the call, direction, and either dialed number or caller ID.

When the ports are NOT set to Record All:

- It will only record extensions that are being monitored by CCS Desk Client.

b. The CCS Desk agent recording profile will control the recording path, the folder grouping and the filename of the recording file. The agent recording profile is configured at the CCS Record tab.

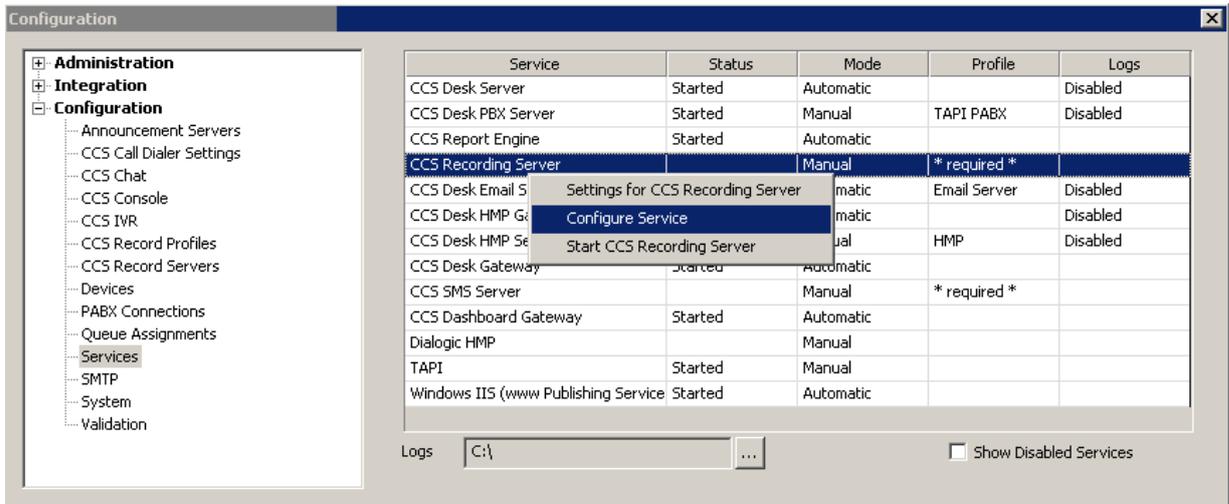


### 1.3.2.5 Activate CCS Record Server Service

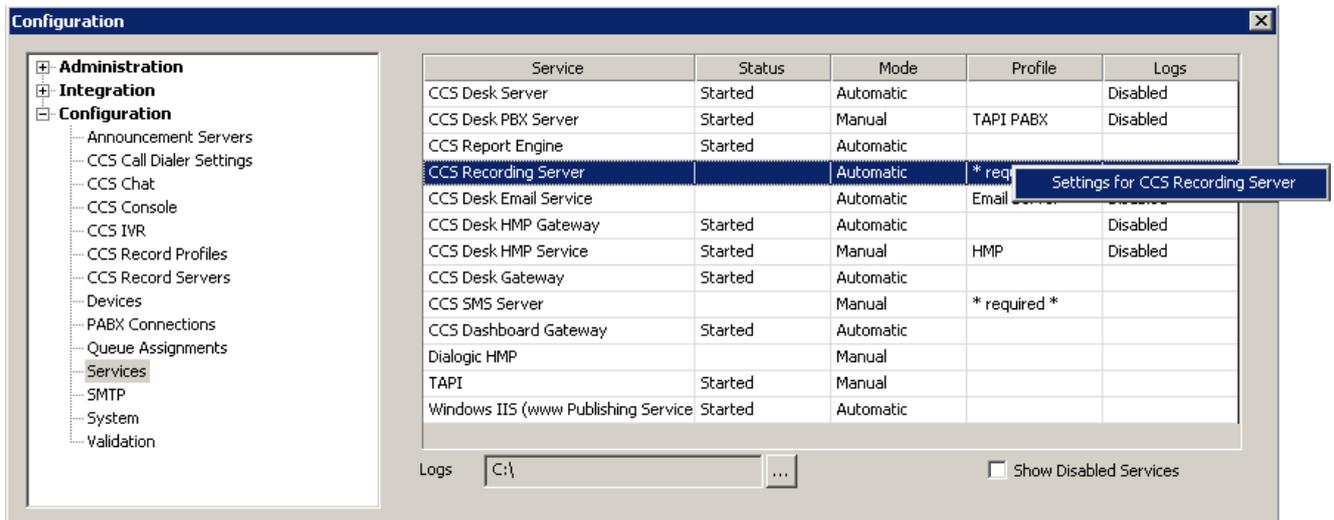
The recording service is included when CCS Desk is installed however it is not enabled by default.

Step 1 - To enable **CCS Recording Server** service → Launch **CCS Desk Manager** → Go to the **Services** tab → then **Show Disabled Services**.

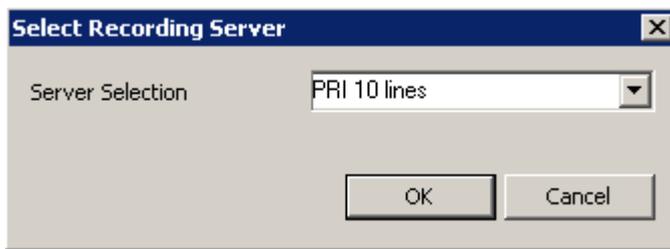
Step 2 - **Right click** on CCS Recording Server → Select **Configure Service** → Click **Install**. Do not start the service at this stage.



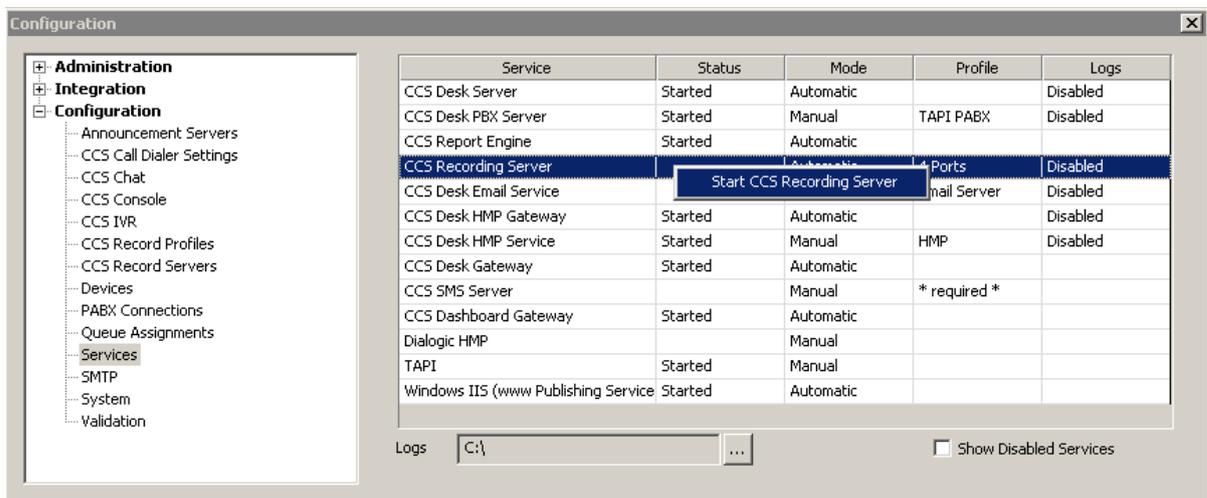
Step 3 – Right click on the Profile for CCS Recording Server. Select **Settings for CCS Recording Server**.



Step 4 – Select **CCS Recording Profile** that was previously created then click **OK**.



Step 5 - **Right click** on CCS Recording Server → Select **Start CCS Recording Server**.



**1.4 CCS Record with VoIP Trunk**

The requirements for CCS Record are divided into two parts:

**9.4.1.1 System Requirements**

**9.4.1.2 Installation of CCS Desk and CCS Report**

**1.4.1 Pre-Installation Requirements**

**1.4.1.1 System Requirements**

The CCS Record Server must meet the following minimum specifications.

<b>CCS Record Recommended Hardware</b>				
<b>Install Scope</b>	<b>Up to 8 channels a maximum of 1,600 calls per day</b>	<b>Up to 30 channels and a maximum of 5,000 calls per day</b>	<b>Up to 120 channels and a maximum of 20,000 calls per day</b>	<b>Up to 600 channels and a maximum of 1,000,000 calls per day</b>
<b>Dedicated Server Required</b>	Yes	Yes	Yes	Yes
<b>Dedicated SQL Server Required</b>	No	No	No	No
<b>Virtual Server Possible</b>	No	No	No	No
<b>Operating System</b>	Windows 7 Professional or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2	Windows 7 Professional x64 or Windows Server 2008 R2
<b>CPU</b>	I3 2120 3.3GHz	I3 2120 3.3GHz	I3 2120 3.3GHz	I3 2120 3.3GHz
<b>RAM</b>	2 GB	4 GB	8 GB	16 GB
<b>Disk Space</b>	500 GB	1 TB	1 TB	3 TB
<b>Network Card</b>	Minimum 2 NICs	Minimum 2 NICs	Minimum 2 NICs	Minimum 2 NICs

## Notes

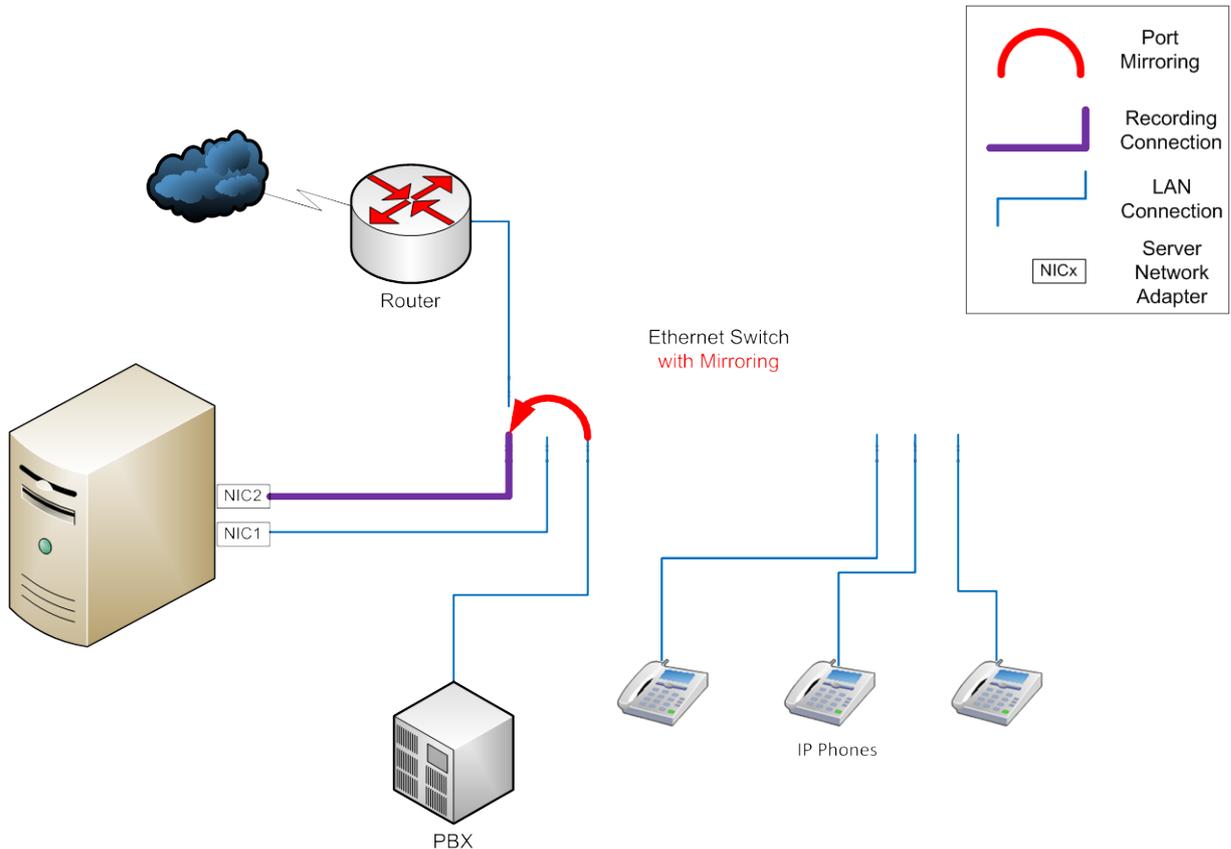
- Only SIP trunk recording is supported with the VoIP recording.
- Site must have network switches with port mirroring capability to route SIP and RTP packets into the recording server. A network hub can be used as an alternative on small sites i.e. up to 10 stations.

### 1.4.1.2 Installation of CCS Desk and CCS Report

Before CCS Call can be configured, the installation of CCS Report and CCS Desk must be completed. Please consult Section 2 and Section 3 for more information.

## 1.4.2 Installation

### 1.4.2.1 Connect the VoIP Traffic

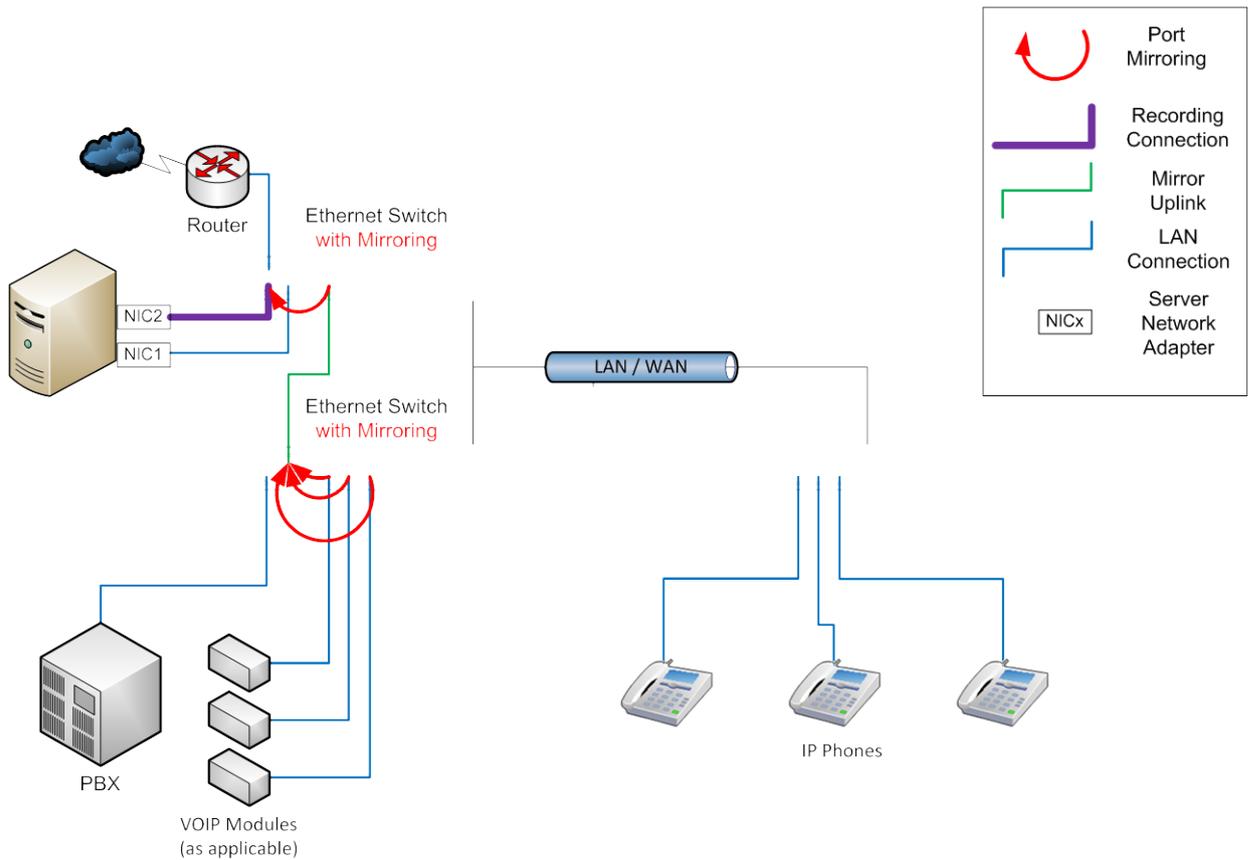


The above diagram shows a simple site with the PBX, the CCS Server and the Internet Router connected to the same Mirroring Ethernet Switch.

NIC1 – this is the connection for the server to connect to the LAN.

NIC2 – this is where the information will be presented for recording – this data is mirrored from the LAN connection of the PBX, as all SIP trunks traffic goes via the PBX. When using SIP trunks the extensions are not connected directly to the SIP provider

The reality is that only few sites will be this simple. It is advisable that the PBX and VoIP modules as applicable are all on the same switch as the connection to NIC2. A network hub can be used as an alternative to the port-mirroring network switch. Please be aware that hubs broadcast all IP packets through all its ports thus can cause network congestion and collision.

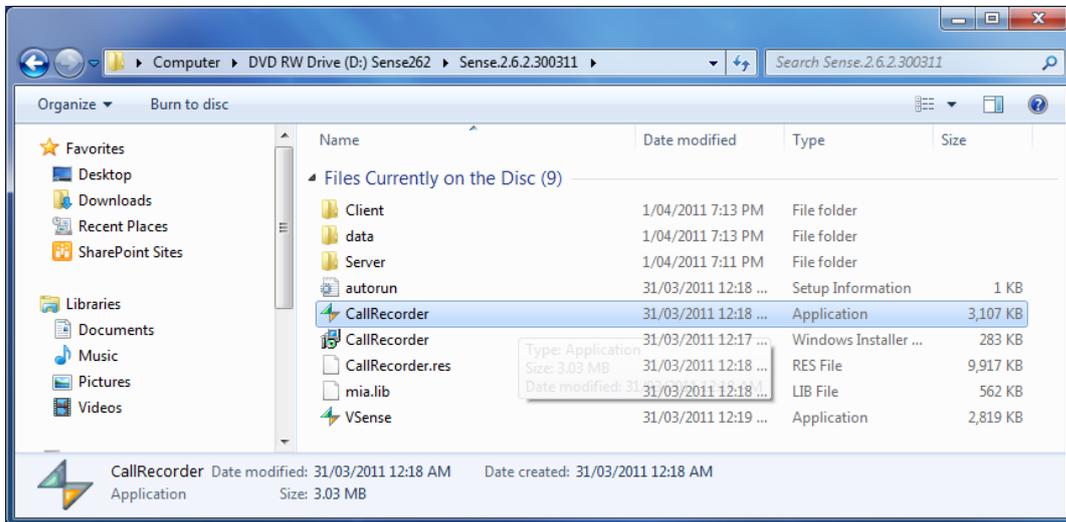


This diagram shows how the PBX and its multiple VoIP modules can be on a separate switch if required. In such case, the VoIP modules still need to be mirrored to a port on the switch where the NIC2 is attached. Thus it would still be preferable to have the PBX, VoIP modules and CCS NIC2 on the same switch.

In the above diagram, the CCS server and the Internet Router are on the same switch. This is simply how the diagram has been drawn and is not a requirement.

## 1.4.2.2 Install Call Recorder

Step 1 - Browse to the recording box software DVD → Run the **CallRecorder.exe**



Step 2 - You will be prompted to **install any prerequisites** that may be required (Service Packs, SQL Express) → Select **Yes** to install.

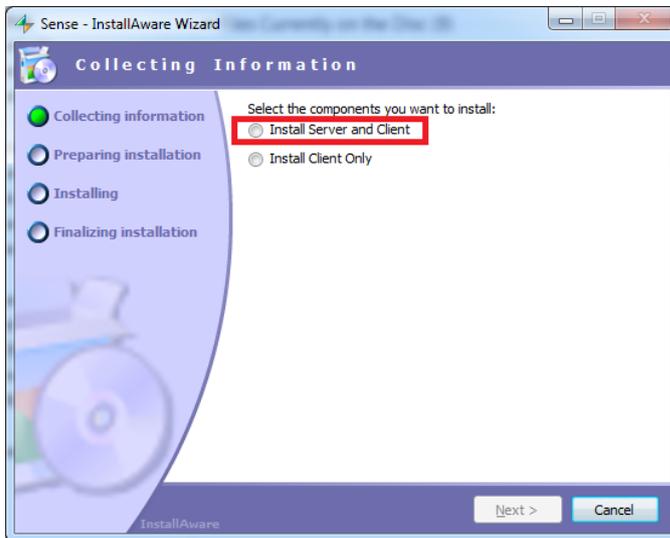
Step 3 - If you are prompted to **reboot** → Select **Yes**.

Once you log back in, the installation will continue where it left off.

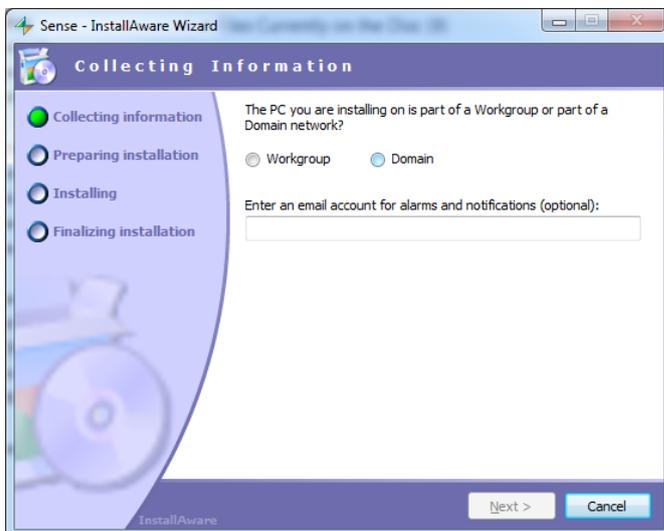
Step 4 - The installer will also recommend that you **connect the recording box** to the Server via USB port and ignore/cancel the 'Found new hardware' wizard.

→ There is **no hardware** to be connected → Click **Next**.

Step 5 - When presented with the option → Select **Install Server and Client** → Click **Next**.



Step 6 - Depending on the **network configuration** → Specify **workgroup** or **domain** → You will also need to enter an **email address** for notifications → Click **Next**.



Step 7 - **Read and Agree to the license agreement** → Click **Next**.

Step 8 - You will need to specify the **path details** → Click **Next**.

**Application Files** – Defaults to C:\Program Files\Retell\Sense

**Data Folder (Temporary Storage)** – Defaults to the Application Folder

**Audio Storage Folder** – Defaults to the Application Folder

**Backup Folder**

**SQL Root Folder** – Defaults to C:\Program Files\Microsoft SQL Server

**Client Location** – Default to C:\Program Files\Retell\Sense Calls

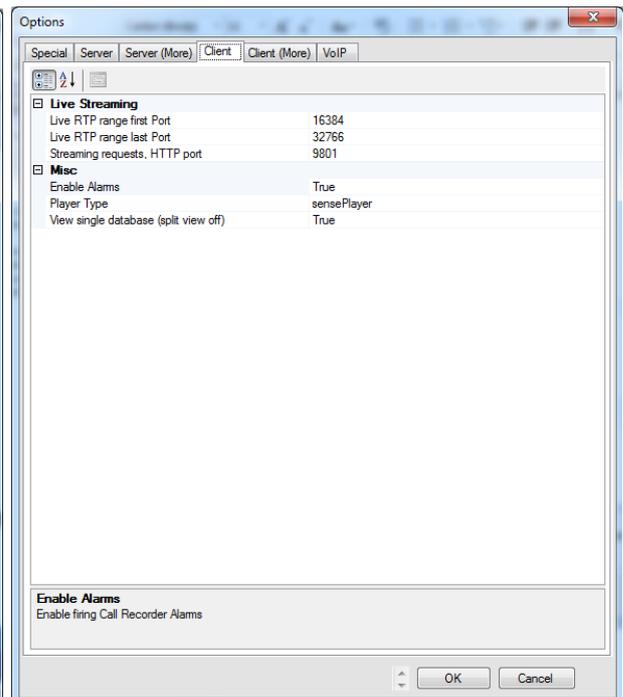
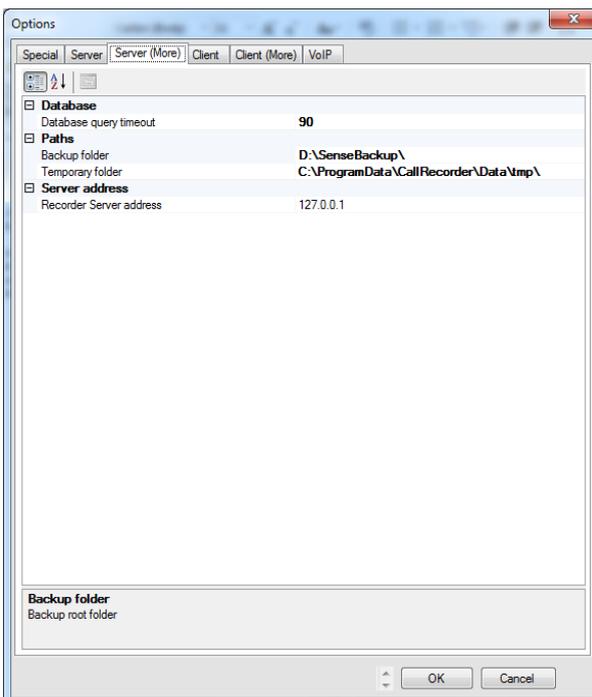
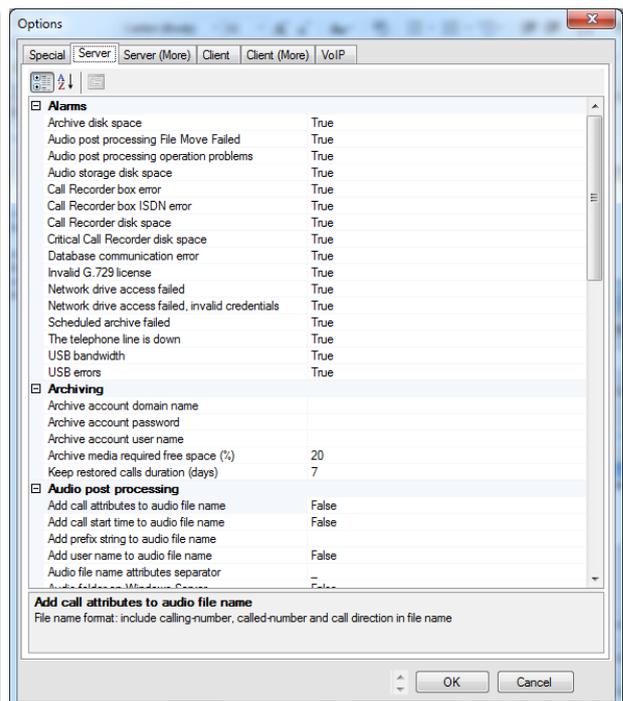
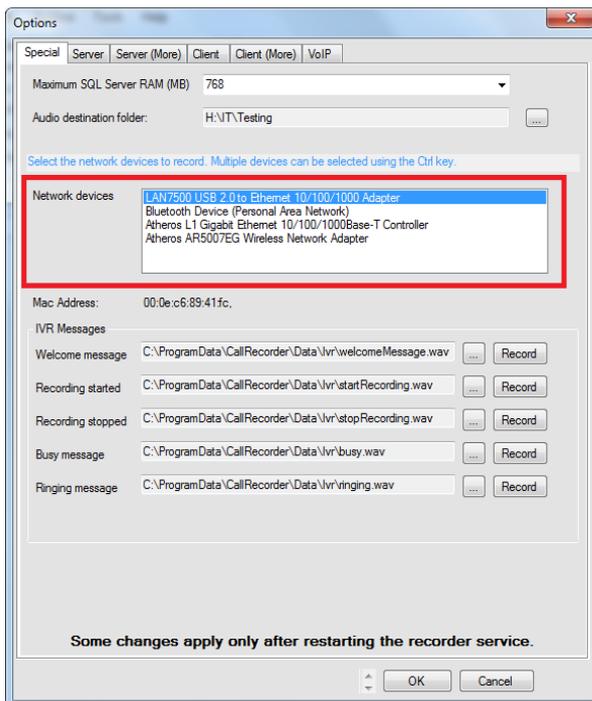
Step 9 - The installer will detect and **install the device drivers**.

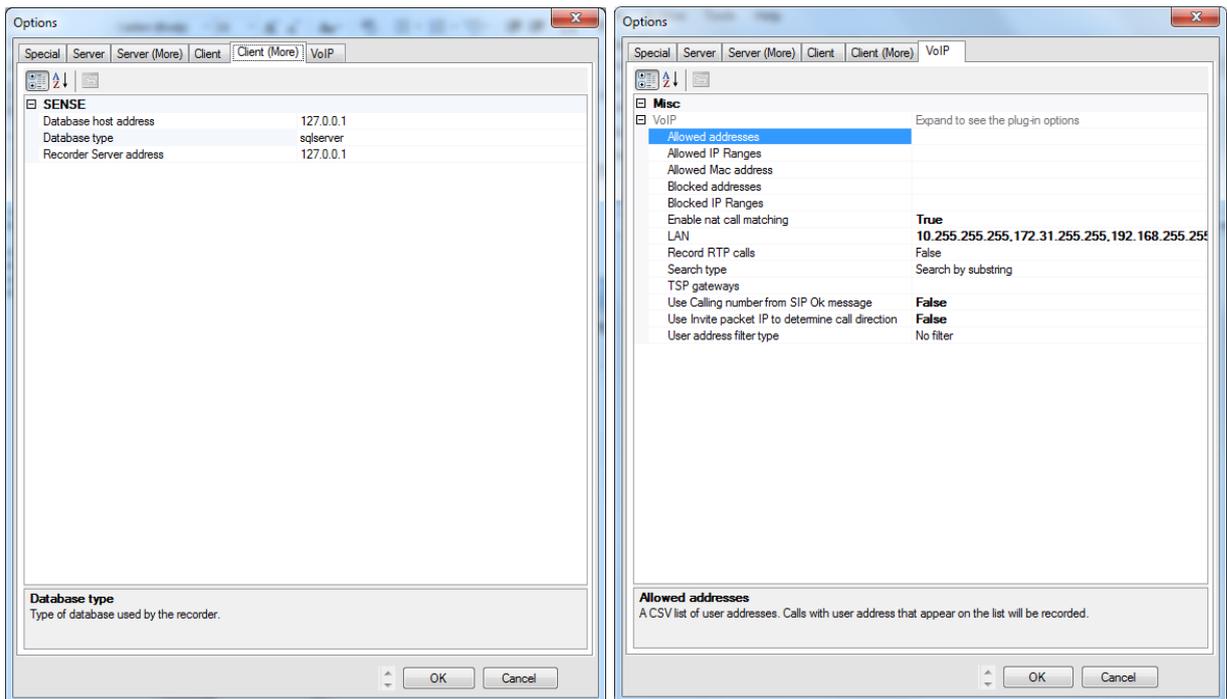


Step 10 - The post configuration screens will be displayed to review → Make sure the correct **Network devices** are selected.

Note

On the **VoIP** tab, you can filter particular IP addresses by filling the relevant fields. If the fields are left blank then it will record all traffic connected to the VoIP mirror device.



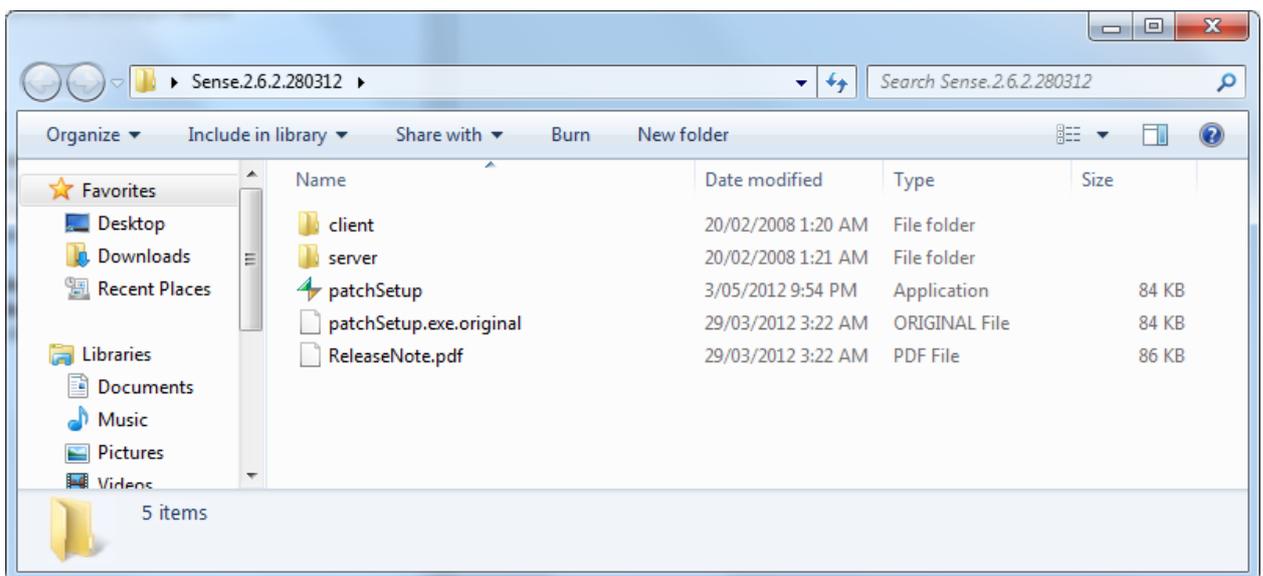


## IMPORTANT

If the software version is 2.6.2.300311 you **must** to complete this step to install an update patch.

Step 11 - The **2.6.2.110612 patch** **must** be installed before the VoIP recording can work properly.

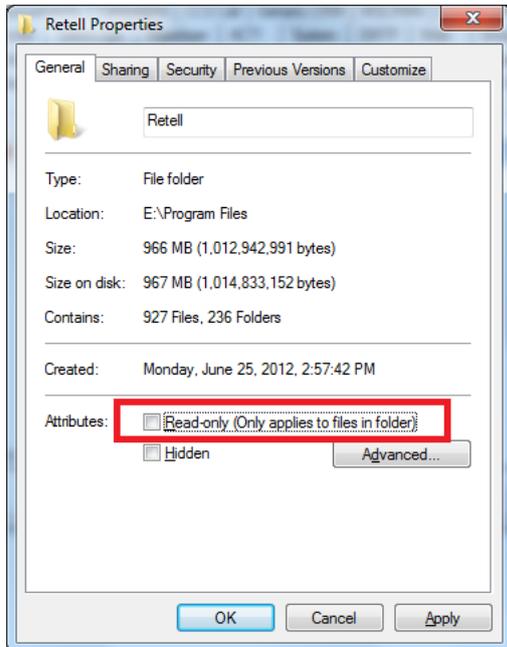
→ Extract the zip file and run **patchSetup.exe**.



## Note

If you experience problems with patch copying over files in the **%Program Files%\Retell** folder

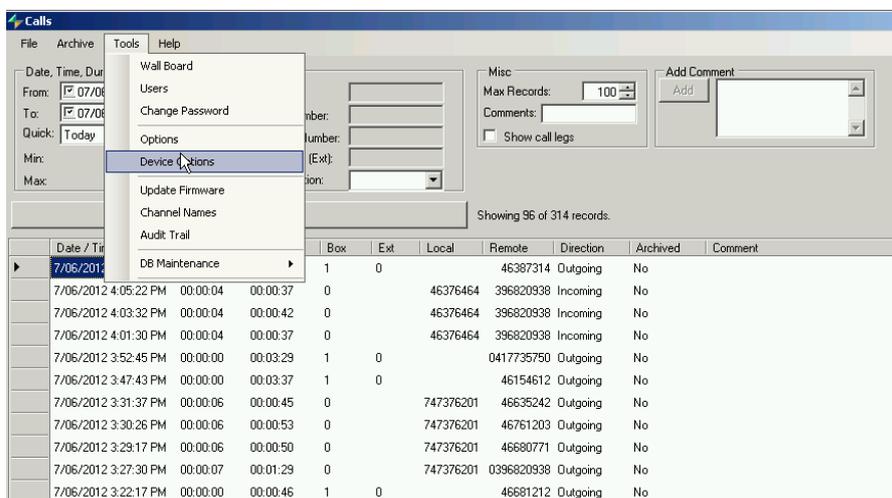
→ Right click the **Retell** folder → Clear the read only flag.



Step 12 - If you want to test **Sense** that calls are being received or to change configuration options → Open **Calls** from the shortcut place on the **Desktop**

The username is **admin**.

The password is **callrecorder**.

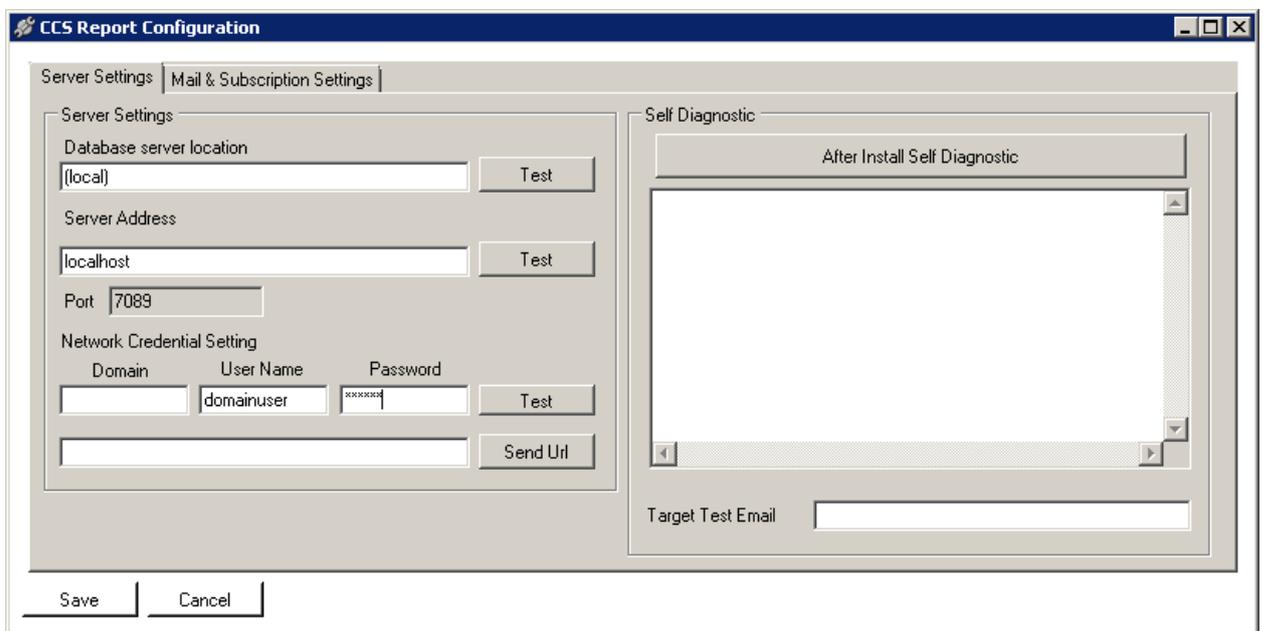


### 1.4.2.3 Configure CCS Report

To link the reports with the recorded audio files, a few things must be configured properly.

Step 1 - CCS Report connection type **MUST** be configured to **CTI**. This can be configured during the installation Config Wizard, or by using CCS Report Manager.

Step 2 - CCS Report Config **MUST** contain a valid network credentials, otherwise access to recordings will require a username and password each time.



Step 3 - If the CCS Record service and recording hardware is installed on a different machine to CCS Report, the **Web.config** file located in the **CCSReportWebGUI** installation folder needs to be adjusted to reflect the location of the Sense installation.

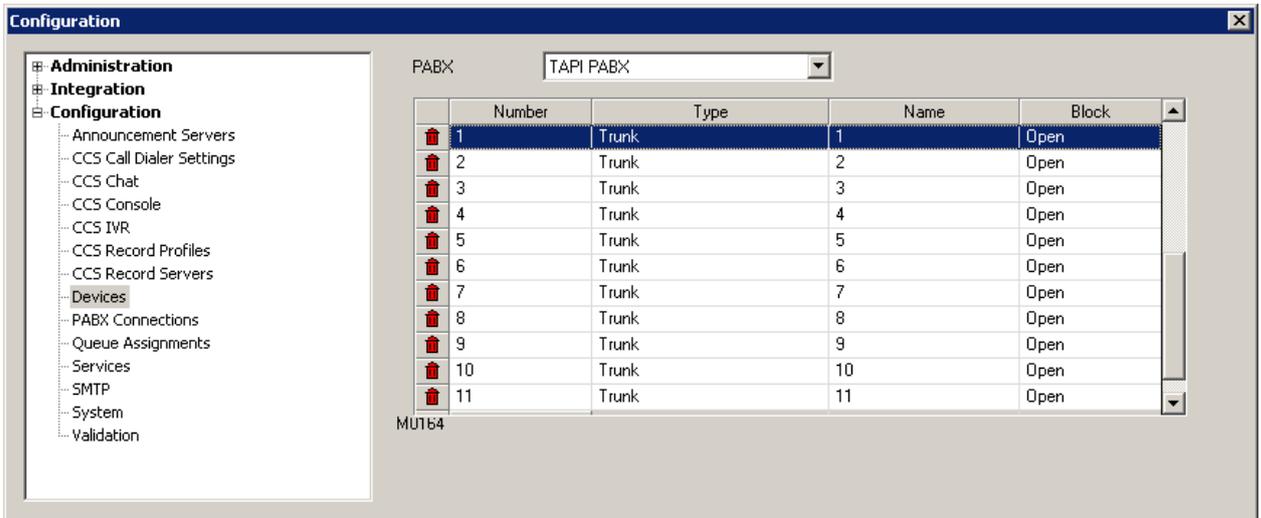
Open the **Web.config** file with Notepad (Right Click → Open With... → Notepad)

→ Search for the line below and set the 'value' with the machine name or IP address of the Sense machine.

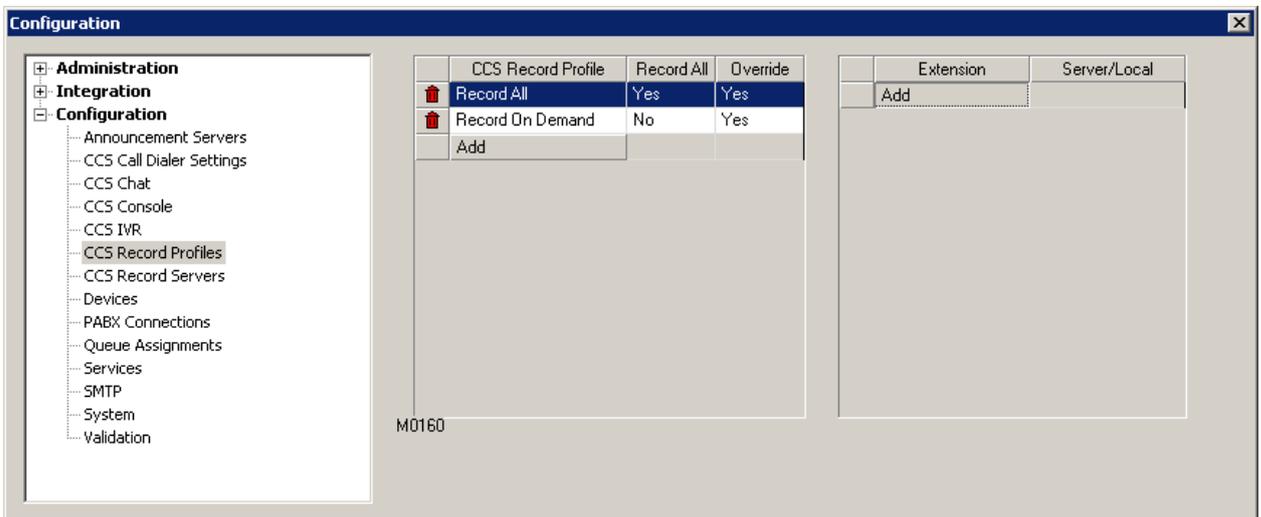
```
<add key="SenseServer" value="localhost"/>
```

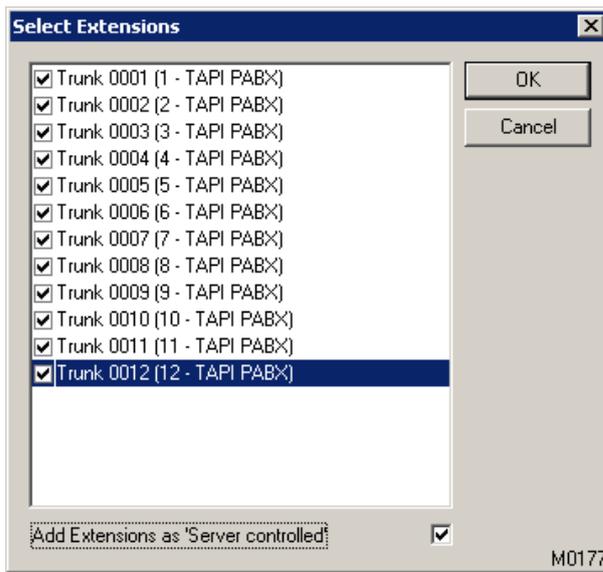
## 1.4.2.4 Configure CCS Desk

Step 1 - Run **CCS Desk Manager** → Go to the **Devices** tab → add the **ISDN PRI trunks** to the **Devices** list.

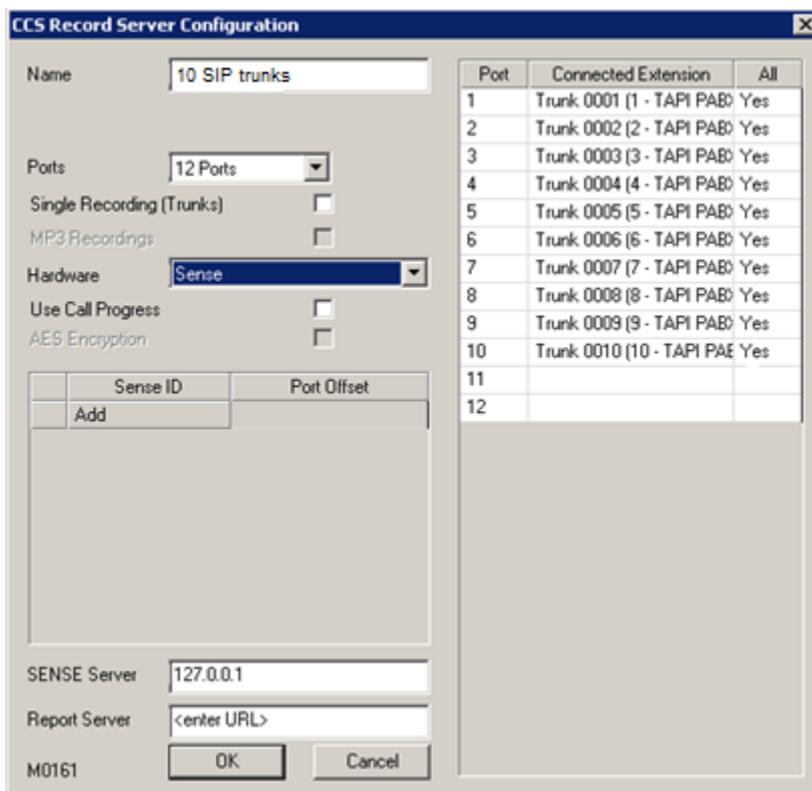


Step 2 - Go to the **CCS Record Profiles** → add the **trunks** as **Server Controlled** devices.





Step 3 - Go to the **CCS Record Server** → **Create a recording configuration profile** → **Map the trunks into the ports.**



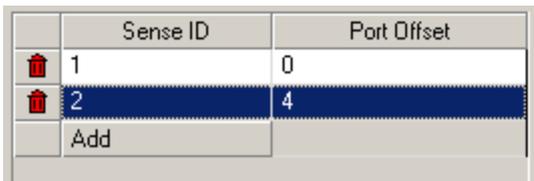
**Name** – The name of the CCS Record Server profile.

**Ports** – The number of ports to be configured.

**Single Recording (Trunks)** – enable this if you wish to combine “multiple” calls (because of transferred) on the same trunk into one recording file. This is applicable to trunk side recording.

**Hardware** – Sense must always be selected.

When there are multiple recording devices connected to the server, **Sense ID** and **Port Offset** must be configured. Assuming there are two analog recording devices, both with 4 ports, this is the correct ID and offset configuration.



	Sense ID	Port Offset
	1	0
	2	4
	Add	

**SENSE Server** – the address of the SENSE Server

**Report Server** – the URL of the Report Server

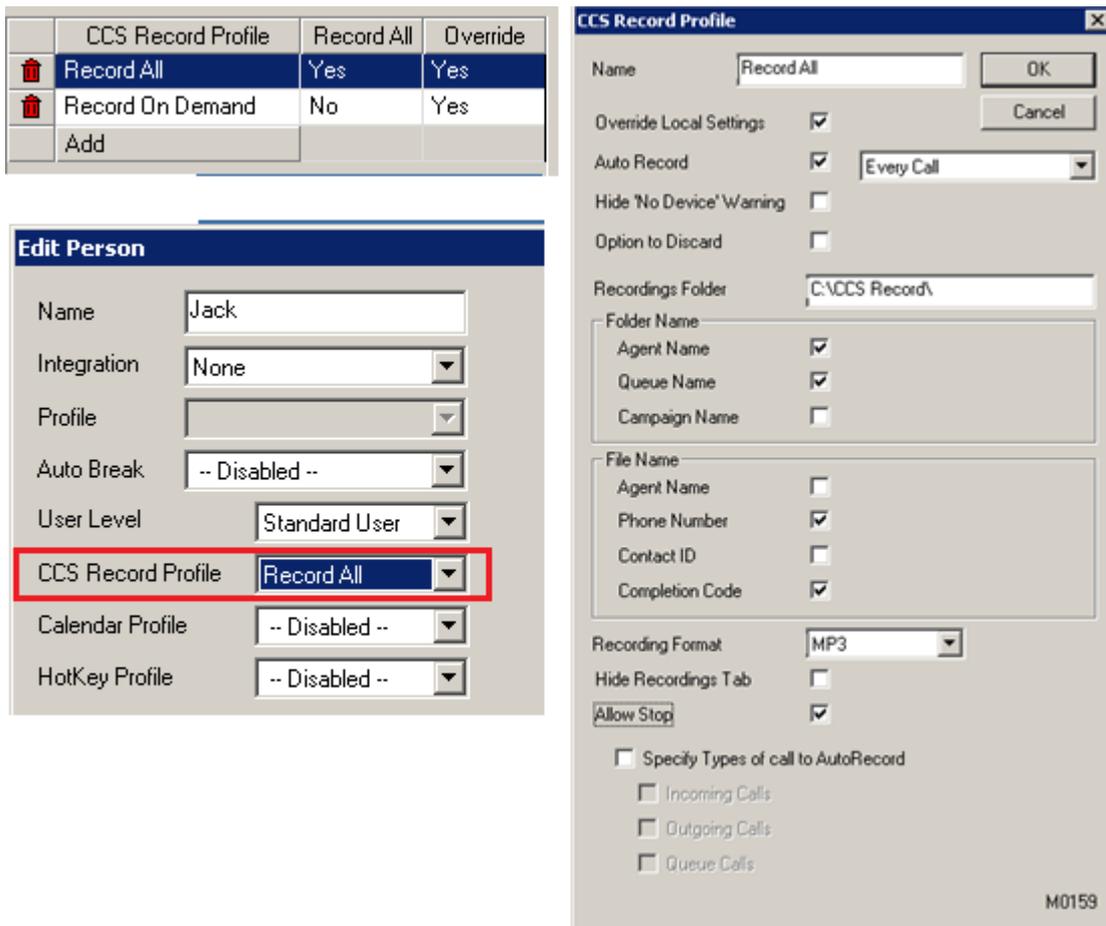
**Port / Connected Extension / All** – configuration of each port and whether they are connected to a trunk, and set to record all or follow the CCS Desk agent recording profile.

When the ports are set to Record All:

- The recording files will saved into folders named by the extension number involved in the call.
- The recording filename will contain the date and time of the call, direction, and either dialed number or caller ID.

When the ports are NOT set to Record All:

- It will only record extensions that are being monitored by CCS Desk Client.
- The CCS Desk agent recording profile will control the recording path, the folder grouping and the filename of the recording file. The agent recording profile is configured at the CCS Record tab.

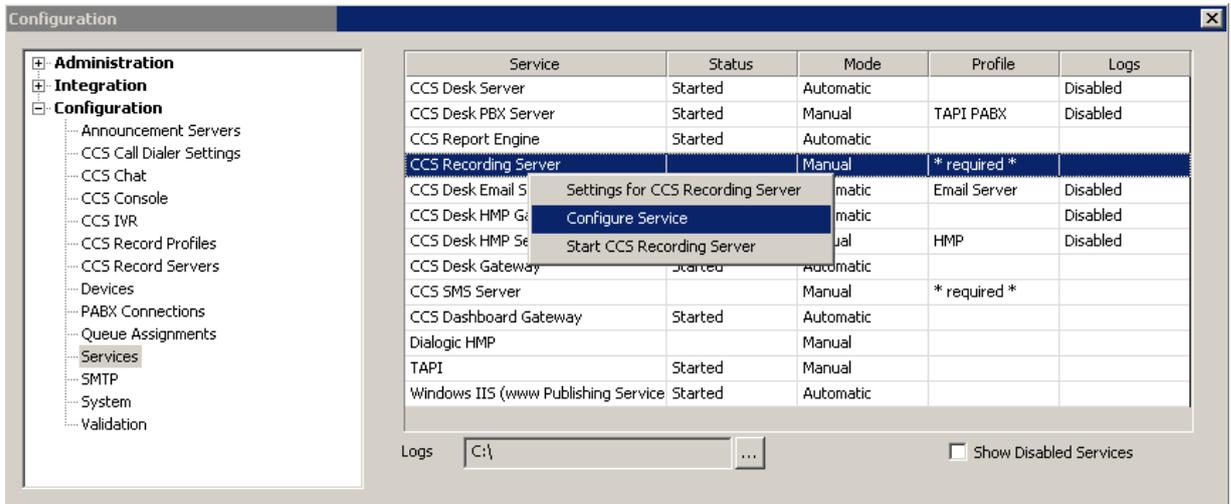


### 1.4.2.5 Activate CCS Record Server Service

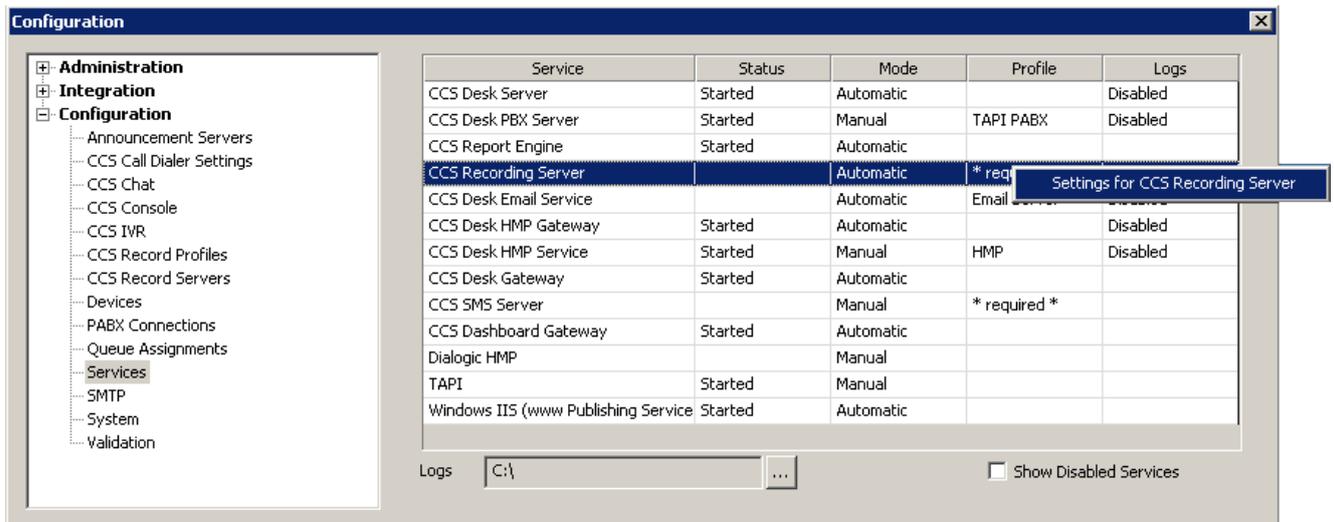
The recording service is included when CCS Desk is installed however it is not enabled by default.

Step 1 - To enable **CCS Recording Server** service → Open **CCS Desk Config** → Go to the **Services** tab → Enable **Configuration Mode**.

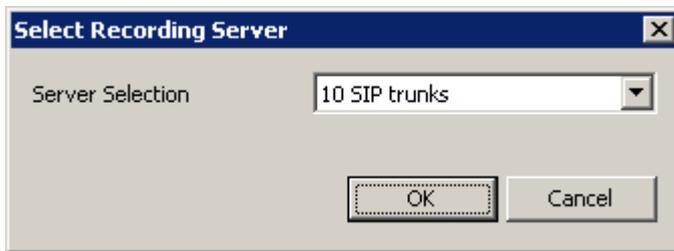
Step 2 - **Right click** on CCS Recording Server → Select **Configure CCS Recording Server** → Click **Install**. Do not start the service at this stage.



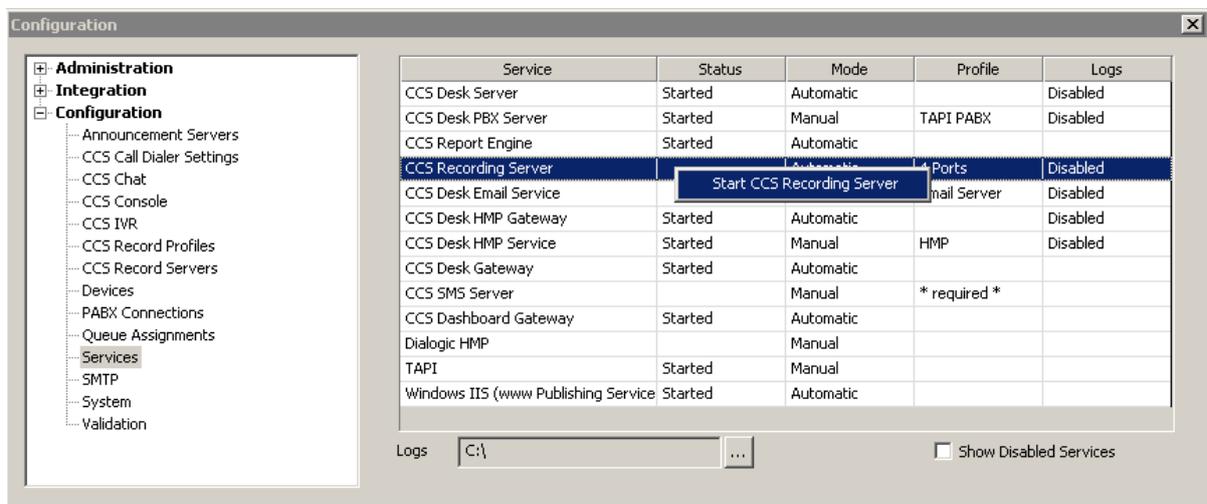
Step 3 – Right click on the Profile for CCS Recording Server. Select **Settings for CCS Recording Server**.



Step 4 – Select **CCS Recording Profile** that was previously created then click **OK**.



Step 5 - **Right click** on CCS Recording Server → Select **Start CCS Recording Server**.



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