



# Excendia Virtual Assistant Integration Guide

Version 5.1

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## Introduction

This guide is intended for system administrators in charge of installing and integrating the Excendia solution in your enterprise and getting it fully operational.

You should undertake this integration phase once you have successfully installed and configured the Excendia server as a standalone speech solution answering SIP calls, playing audio and text messages using TTS, responding to speech and DTMF commands. For more information, consult the [Excendia Installation & Configuration Guide](#).

## Excendia Integration in the Enterprise or Service Provider

Excendia may be installed as a hosted service operated by a service provider (ASP model) or as a private enterprise solution (CPE model). The Excendia integration procedure is the same for both models. The main difference is in the purpose for which the system is used: as an in-house productivity tool for company employees or as a commercial service to generate revenues from subscribers.

In the ASP model, the voice and telephony communications between the service provider and the companies that subscribed are done through the Internet (or wide area network), while in CPE models, all communications are done over the corporate LAN.

### ***Excendia as a Hosted Service (ASP) or Enterprise Solution (CPE)***

The integration of Excendia inside your enterprise or at the IP Centrex service provider center is rather straight forward. You only need to configure it as a SIP extension on your PBX (CPE) or IP-Centrex (ASP), then connect it to the Internet and you are done.

#### **1. You must configure the Excendia server to ...**

- to accept incoming calls from your PBX or IP-Centrex
- to make outgoing calls through your PBX or IP-Centrex

#### **2. And, you must configure your PBX or IP Centrex to ...**

- to forward all calls for Excendia users and services to the Excendia SIP extension. The telephone numbers assigned to Excendia must be configured in the PBX or IP-Centrex call routing tables. Calls to Excendia can be originating from internal PBX extensions, the PSTN or the IP network.
- to accept and execute Excendia's requests to make outbound calls either to PBX extensions or to external telephone numbers.
- The SIP messages to forward calls to Excendia are in the following format:

**sip:[ DID\_Assigned\_to\_Excendia ]@[ Excendia\_IP\_Address ]**

Note that the creation and configuration of DIDs for Excendia users and services is discussed later in this document.

#### **3. And, you must reserve and assign a public IP address to Excendia in order to ...**

- enable users to access and manage their Excendia account from the Web while traveling;
- enable users to call Excendia services such as Outlook-by-Phone and Auto-attendant from any SIP Phone using Voice over IP (VoIP) while on the road.

You must have sufficient skills in SIP communications and a good knowledge of the call switching systems in place to make these configuration changes.

## TCP/IP Ports to Open on your Firewall

Place your Excendia servers behind a firewall to protect your system from public-IP threats and open only the following TCP/IP ports to allow your Excendia server to function properly:

Port Name	Port Number	Excendia Usage
SIP Port	5060	to accept and make SIP calls
RTP Ports	44000 – 45000	to exchange audio during SIP calls
SMTP Port	25	to send e-mails
SSP Port	13	for platform licensing
ELS Port	7800	for application licensing
Notifier Port	7850	to make notifications
Web Manager Port	80	to accept Web manager sessions

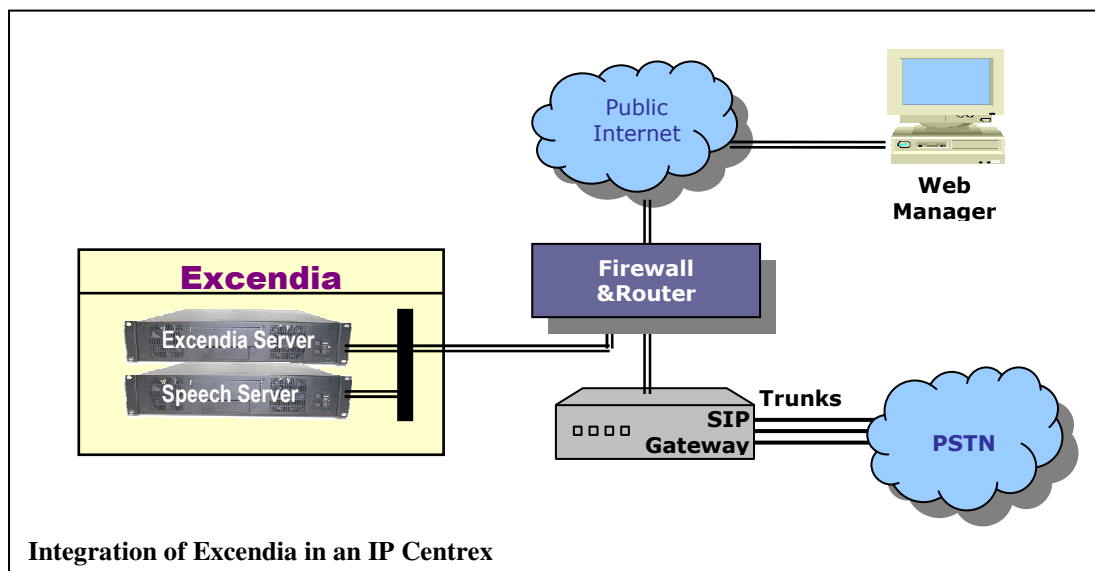
## Integrating Pre-configured Excendia Servers

If your Excendia servers have been pre-configured and tested by an Excendia reseller, you only have to configure the following parameters to integrate Excendia server in your environment:

Parameter	Description
SMTP Server	Enter the name of your SMTP server to send e-mails
TAPI Telephony	Set TAPI to use your country and area codes
SSP Registration	Enter the IP address of your IP gateway in the SSP class.xml to enable its registration.
Speech Server	Enter the IP address of the MRCP speech server in SSP.xml
System admin	Enter the system administrator's credentials (e-mail & password)

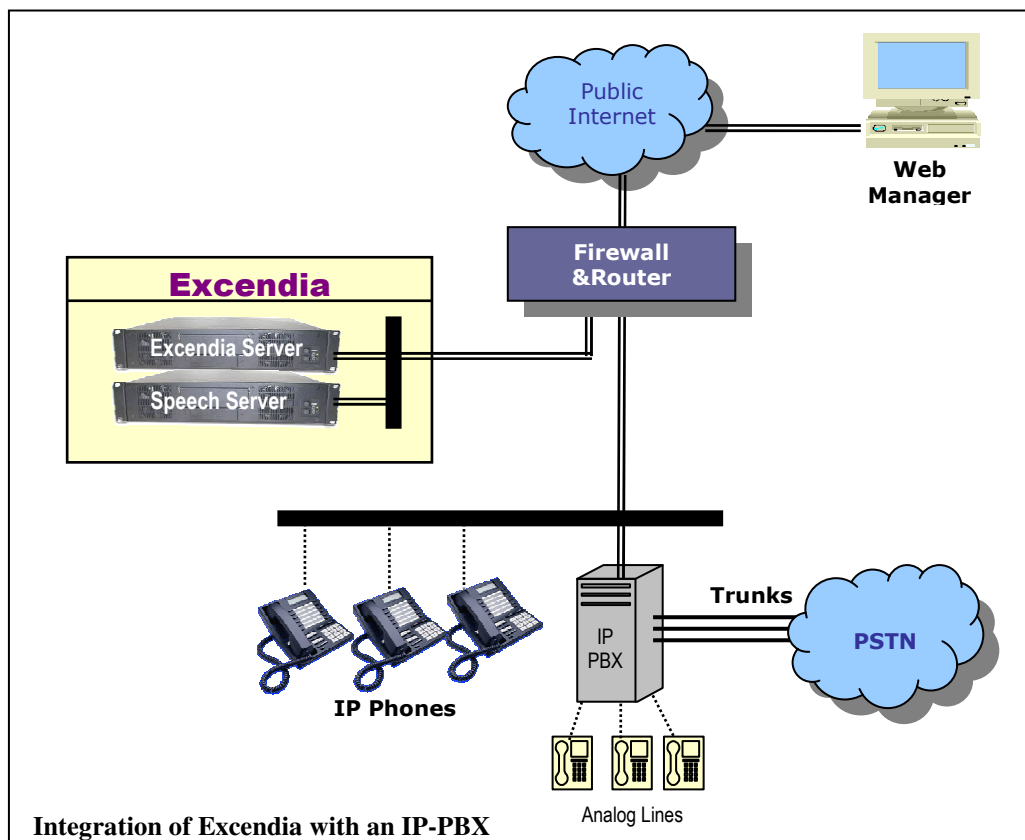
## Integrating Excendia as a Hosted Service (ASP) with IP Centrex

Excendia can be configured as a hosted application to provide virtual assistant and mobility services to enterprises and individuals. It can be deployed as a stand-alone mobility service center or integrated with an IP Centrex service center. In both cases, Excendia uses Internet for data and voice communications. On the data side, it uses Internet to connect to the subscriber's mail server to access e-mails, calendar and contact information, .



## Connecting Excendia to an IP-PBX

If your enterprise uses a **SIP-based** IP-PBX, configure Excendia as a SIP extension on your IP-PBX. This SIP extension can be local on the LAN (CPE model) or remote on the public Internet (ASP model).



## Integrating Excendia with Asterisk as the IP-PBX

If you are using [Asterisk](#) as the IP-PBX in your enterprise, click on the [Step By Step Asterisk Configuration Guide](#). This will also guide you on how to add and configure the Fax-to-Email option for your Excendia solution.

## Connecting Excendia to a Legacy-PBX

If you are using a Legacy PBX in your enterprise, you need to install and configure a **SIP Gateway** to interface between SIP Phones and your legacy PBX trunks (PSTN) and digital phones. This SIP Gateway can be:

- ❑ a card added to your legacy PBX configuration to support SIP extensions;
- ❑ an external box that connects to your legacy PBX as digital extensions (emulation) on one side, and provides a SIP interface for IP phones on the other;
- ❑ a server or external box that intercepts the trunks between your PBX and the PSTN as a pass-through while adding IP telephony functions.

As shown in the diagram below (figure 2), the SIP Gateway interfaces between your Legacy PBX and your LAN. This would transform your legacy PBX into a hybrid TDM and VoIP telephony system ready to host the Excendia server.

More details about the integration process could be found at this link: [Integration of VoIP with legacy PBX systems.](#)

Once you have successfully configured and connected your Legacy PBX to your SIP Gateway, you are ready to connect Excendia as a SIP extension on the SIP Gateway.

Any calls to Excendia users or services will be forwarded by your legacy PBX to the Excendia SIP extension through the SIP Gateway.

