

#### **Overview**

PAXGuide Cloud is the cloud based automatic announcement system from Sittig. The system allows to automate announcements in high quality in over 29 languages to reduce operating costs and increase efficiency and customer experienc at airports. Thanks to its cloud based software structure only a minimum of additional hardware is required and no on-site servers are needed. Furthermore, the system uses the existing PA and IT hardware and has interfaces to all major PA brands, such as Bosch, Honeywell, IED, TOA etc. The system acts as a management platform one level above the sound systems and is therefore also able to interconnect different PA-systems with each other.

PAXGuide Cloud has ben designed modularly, which means it can be customized easily and therfore be perfectly tailored to the customers needs with interfaces to several other systems. Furthermore, the lean cloud version can be put into operation quickly and is mainly based on a monthly licensing model.

## Use cases for automatic announcements at airports

- Automation of general announcements & information such as: "Please don't leave your luggage unattended"
- Automation of boarding announcements, such as first call, boarding group calls, last call, etc. triggered by an interface to the AODB. No Handling Agent at the gate is needed to perform the announcements
- Announcements in the native language of the arriving/departuring passengers
- Automation of additional business processes and information delivery with interfaces to other systems (examples: Interface to camera systems to increase/decrease volume in highly frequented areas, or information of ground staff)

# All benefits at a glance



#### Automation in 29+ languages

Announcements can be generated in over 29 languages to ensure that every passenger understands the message. In addition, one of the best Text-2-Speech engines on the market can be used for maximum flexibility.



### Interfaces to all major PA-systems

Interfaces to: Bosch Praesideo / Praesensa / Paviro, Honeywell Variodyn D1, TOA SX-2000 / VX-3000, Dynacord Promatrix 9000/8000/6000, IED Globalcom, G&M, Biamp Voica.



#### Announcements as a Service

Lean and flexible pricing model with monthly license costs to optimize the CapEx. Suitable for small-, medium-sized and large airports.



#### Modular designed

The PAXGuide system has been designed modularly, which means it can be customized easily and therefore be perfectly tailored to the customers needs. Modules for different use cases make it extremely flexible.



# Uses the existing infrastructure

Thanks to state-of-the-art IP technology, PAXGuide uses existing cabling, loudspeakers and IT infrastructures. Thus, no costly rewiring is necessary.



#### Secure cloud hosting

All software modules, functionalities and databases are streamed from the Sittig Cloud via highly secure connection. Thus, no onsite servers are needed.



### **System Modules**

The system consists of different modules that can be easily and flexible assembled.





### **Automatic Announcement Modules**

Core user interfaces for operating the Automatic Announcement System. Specialized for various applications.



### **PAXpaging**

Web application for central announcement stations for management of time-controlled, stored and manual announcements. Predefined templates consisting of stored text blocks, Text-2-Speech texts and ad hoc recordings can be individually compiled and output. In addition, all announcements triggered by the system are displayed in a global history database. PAXpaging is ideal for info counters and central announcement workplaces.



### **PAXgate**

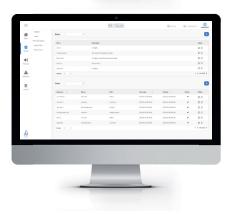
Web application for automization of the announcement process at the airport gate. Announcements such as first call, boarding call, etc. can be triggered automatically with up-to-date information from the AODB or can be triggered manually by the handling agent at the gate during the boarding process. The gate announcements can be transmitted to any airport location, they are however directed to the zone of the specific gate by default. Of course, manual gate announcements are still possible. PAXgate is a helpful partner for the ground staff to automate the standard boarding announcements in a high, consistent and understandable quality.





### **PAXcallpoint**

Web application with graphical zone selection for management of time-controlled, stored and manual announcements. Predefined templates consisting of stored text blocks, text-2-speech texts and ad hoc recordings can be individually compiled and output. In addition, the software provides graphical feedback on the zone selection about the current occupancy status and possible faults. The module is designed to have every feature on one screen with no additional tabs.



#### **PAXadmin**

Web application for configuration and administration of the PAXGuide system. Automatically detects the integrated software modules as well as IP Paging-Stations and enables userfriendly configuration of these. The configuration options are very extensive and include the administration of users, announcements, destinations and priorities as well as the assignment of the IP Paging-Stations and many more. PAXadmin is included in every PAXGuide Cloud system.



### **Database Modules**

The interface to flight or train information databases, which are needed to output announcements automatically and with individualized content.

The following database interfaces are available (further interfaces on request):

- AODB: Interface to the central database system of the airport to automate announcements in realtime
- **Display Systems:** Interface to the database of displayboards at airports or railway stations to automate announcements in realtime
- Railway Database: Interface to the central database of the railway station network operator to automate the announcements
- Online-Provider: Interface to the database of an online provider for realtime data to automate announcements in realtime (e.g. GTFS)



### **Speech Modules**

Different technologies for audio announcements in realtime and high quality.

The following Speech modules are available:

- **Prompt Voice:** Prerecorded text blocks recorded with native speakers in high quality that are automatically assembled for each announcement
- Online-Text-2-Speech: Live generated announcements with one of the best Text-2-Speech engines on the market. Very flexible and cost efficient
- Offline-Text-2-Speech: Text-2-Speech engine that is running on the local server (available languages on request)



## **Available Languages**

If a language is needed that is currently not in our portfolio, we can create it using our large network of professional native speakers and our own sound studio (Prompt Voice only). There are no additional costs for the creation of a new language.

The following languages are available in our portfolio at the moment (Prompt Voice and Online-Text-2-Speech):

Language	PV	T2S
Albanian	х	
Arabic	х	х
Chinese	x	х
Danish	×	х
German	х	х
English (US)		х
English (Australian)		х
English (British)	x	х
English (Indian)		х
English (Welsh)		х
French	х	х
French (Canadian)		х
Greek	х	

Language	PV	T2S
Hebrew	x	
Hindi	x	х
Indonesian	х	
Icelandic		х
Italian	х	х
Japanese	×	х
Korean	х	х
Mongolian	x	
Dutch	х	х
Norwegian		х
Plattdeutsch	х	
Polish	x	х
Portuguese (Brazilian)		х

Language	PV	T2S
Portuguese (EU)	х	х
Romanian	х	x
Russian	х	x
Swedish		x
Spanish (US)		х
Spanish (European)	х	х
Spanish (Mexican)		х
Thai	х	
Czech	х	
Turkish	х	х
Urdu	х	
Vietnamese	х	
Welsh		х



# **PA-System Modules**

We are experts in interconnecting PA-systems from various brands. Our established interfaces to all major PA-system provider ensure a smooth operating system. The PAXGuide Cloud System has inetrfaces to:

- Bosch Praesideo, Praesensa, Paviro
- Honeywell Variodyn D1
- TOA SX-2000, VX-3000
- IED Globalcom
- Dynacord Promatrix 9000/8000/6000
- Biamp Voica
- G+M



#### **Other Modules**

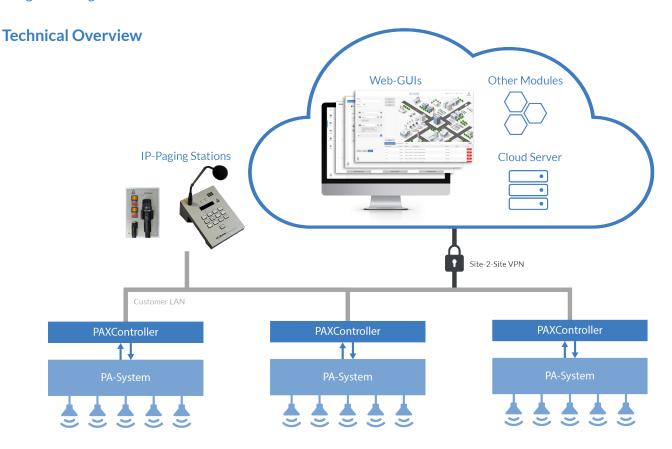
Additional modules can be easily added to increase automation and meet other customer needs. Such as an interface to the camera system (e.g. Xovis) to automate announcements based on the passenger flow.



# PAXModular IP Paging-Stations

Up to 10.000 IP paging-stations can be connected to the PAXGuide system. With the PAXModular IP Paging-Stations, Sittig offers a wide range of different paging-stations (shape, size, number of buttons, touch) for every use case. Thanks to the transmission of control commands (buttons, lamps) and audio data via IP, only a standard (RJ45) network cable is required for connection. The "Layer 3" capable paging-stations are powered by PoE and can also be used in connection with routers. The audio data is transferred to the PAXGuide software via RTP-PCM- Unicast or Multicast stream and is then transferred to the connected PA system.





Gateway The Sittig PAXController is the Gateway between the PA system/Airport and the Sittig Cloud. It

has to be installed on-site and is connected via a secure site-to-site VPN with the Sittig Cloud. Per

PA-system one PAXcontroller is required.

Sittig Cloud The Cloud is hosted in a state-of-the art Data Center in Frankfurt/Germany. Virtual Machines and

additional systems are getting patched in regular intervals. It is also possible to set up a private

cloud for an airport group.

Web-GUIs PAXpaging, PAXcallpoint, PAXgate and PAXadmin GUIs and backend processes are running on vir-

tual machines in the Sittig Cloud. They can be accessed via the secure site-to-site VPN and corre-

sponding user credentials. The user interfaces are not accessible using the public internet.

**IP-Paging-Stations** IP-Paging-stations are getting connected to the PAXController. Means they are not connected

with the cloud directly.

Fallback If the customer has an internet failure or for other reasons a connection to the Sittig Cloud cannot

be established, he can trigger manual announcements with the IP-Paging-Station at any time.

