Connecting Innovaphone PBX

FrontStage
Administration

FrontStage

License agreement

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1   Introduction

FrontStage component responsible for communication with PBXes is called ProServer.

ProServer is a key and mandatory component of any FrontStage contact center solution. It acts as a communication gateway controlling the PBX, as a message broker between FrontStage components, and manages agent workplaces.

If the contact center solution includes voice calling, FrontStage will use a branch exchange (PBX) to which extensions or other PBXs are connected.

Note You will often come across the terms telephone system or call server, which have the same meaning as branch exchange (PBX).

1.1   Supported PBXes

From the perspective of FrontStage, the PBX is an external system with which it communicates via ProServer. Therefore, the PBX must be one of those that ProServer can communicate with and control them using the CTI interface.

To connect the PBX to ProServer, select the appropriate connector and connection string. The connection string tells where the PBX is located, what its behavior should be, and the behavior of FrontStage. Because of the differences among the branch exchanges, each has its own way of writing and configurable parameters.

Vendor	CTI interface	Models and lines
Cisco	JTAPI	CUCM V8.62 and higher
Mitel	CSTA	A5000
Mitel	CSTA	MX-ONE
Mitel	CSTA	MD110
Alcatel-Lucent	CSTA	Omni PCX (OXE) from Version 1.4
Siemens	CSTA	HiPath 3xx and higher
Asterisk	AMI and uaCSTA [1]	Version 13 and higher
Sangoma	AMI and uaCSTA [1]	FreePBX, Sangoma
Altigen	Proprietary	MaxCS
Aarenet	CSTA	AS7

Innova	Proprietary	InnovaPhone

1.2   Deployment schema

The majority group of branch exchanges that allow ProServer to control extensions using the CTI protocols does not require ProServer to have a network connection to the extensions. The CSTA, JTAPI, and proprietary protocols allow ProServer to have full control over the extensions.
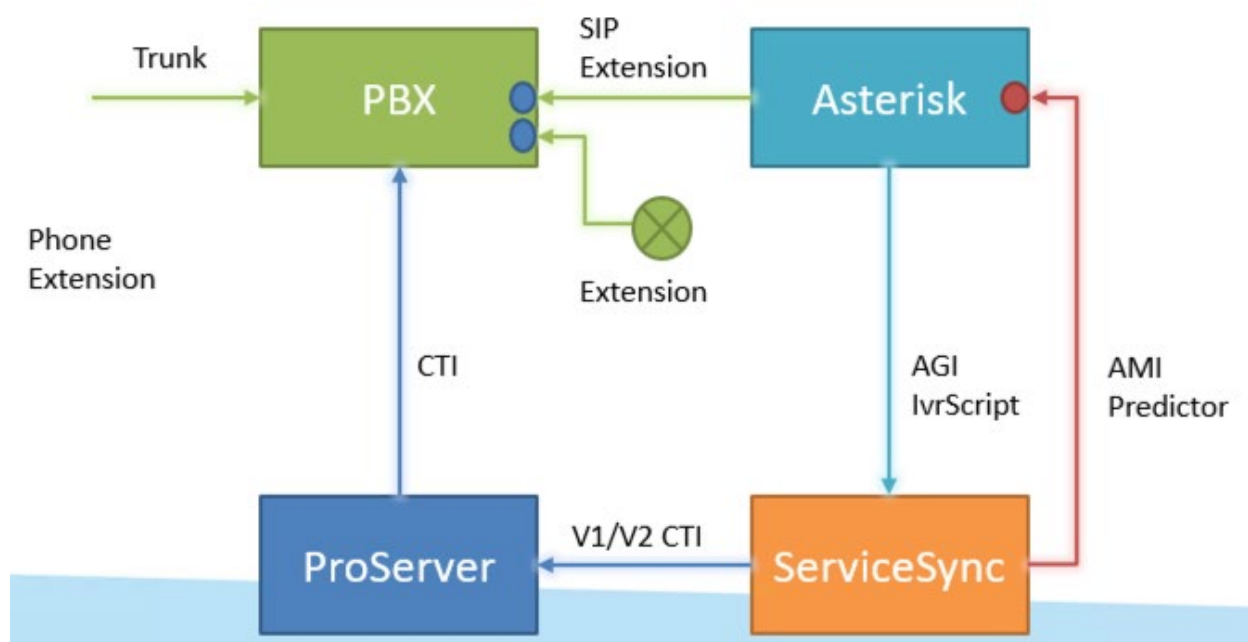
2   Connection

2.1   Process overview

Connecting FrontStage's ProServer with Innovaphone PBX is not a difficult process.

1. In Innovaphone, create App and User objects
2. In ProServer, choose and connect to Innovaphone

2.2   Setup Innovaphone PBX

Necessary setup at Innophone part is very easy.

1. Sign-in to Innovaphone administration.

2. Create App object that will be used for ProServer connection controlling call distribution:

General	App	Apps

Type: App

Description: _____ Hide from LDAP ☑

Long Name: FSAPI

Name: fs-api

Password: ••••••••   retype Password: ••••••••

Critical: ☐

Devices

Hardware Id	Name	App	PBX Pwd	No IP Filter	TLS only	No Mobility	Config VOIP	Reverse P
fs-api			☐	☐	☐	☐	☐	☐
			☐	☐	☐	☐	☐	☐

with the following permissions:

General	App	Apps

URL: https://192.168.1.176/PBX0/APPS/websocket   connecting

Licenses: ____

Plain website ☐
Hidden ☐
Websocket ☑
Local presence ☐

Grant access to APIs

PbxSignal ☑
EpSignal ☑
Messages ☐
TableUsers ☐
Admin ☑
PbxApi ☑
Services ☑
RCC ☑

3. Create User object used for waiting queue calls processing client.

General	User	License	Apps	DECT

Type: User

Description: _____ Hide from LDAP ☑

Long Name: fsqueue   Display Name: _____

Name: fsqueue   Number: 10   Critical ☐

E-Mail: fs-queue☐;_____

Password: ••••••••   retype Password: ••••••

Node: root   Local ☐

PBX: ____

Send Number: ____ External: ____ Dial In ☐ URL _____

Group Indications: ____

Config Template: ____

Devices

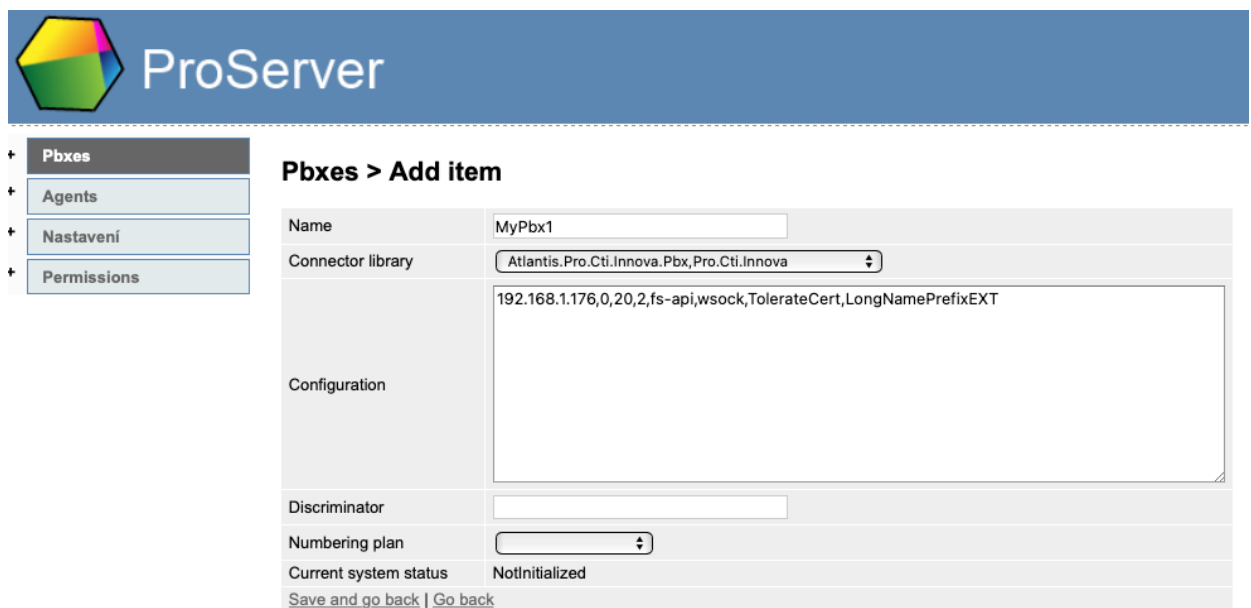| Hardware Id	Name	App	PBX Pwd	No IP Filter	TLS only	No Mobility	Config VOIP	Reverse Proxy	Single Reg.	Media Relay
fsqueue			☐	☐	☐	☐	☐	☐	☐	☐
			☐	☐	☐	☐	☐	☐	☐	☐

2.3 Setup ProServer

After completion of steps in Innovaphone administration, you are ready to connect ProServer to it.

1. Sign-in to ProServer administration.

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2. Go to PBXes right menu, choose "Add item" bellow the list of existing PBXes.
3. Complete the form:

- Name – human name
- Connector library – choose "Atlantis.Pro.Cti.Innova.Pbx,Pro.Cti.Innova"
- Configuration – connection string (see bellow)
- Discriminator – additional optional description of PBX
- Numbering plan – choose numbering plan suitable for your country
- Current system status – read-only field

4. Click „Save and go back"

2.4   Innovaphone connection string

The connection string is a comma separated list of parameters. There must not be a space between parameters. Some parameters are optional.

Mandatory parameters are not given names but values. The order in the string determines which parameter it is.

- o   For example, ParamVal1,ParamVal2,ParamVal3

- o   are the values of three mandatory parameters determined by their order

Optional parameters are entered after all mandatory ones. For parameters of the boolean (true/false) type, their name is given. The presence of the parameter enables the option, the absence of it disables it.

- o   For example, ParamVal1,ParamVal2,ParamVal4,BoolParamName

  o are three mandatory parameters and an optional fifth one of the boolean type

Optional parameters that require a value are written as *<ParameterName><value>* - as if you are creating a new parameter name that is composed of the name and value given together.

  o For example, ParamVal1,ParamVal2,ParamVal3,ParamNameWithValue33

  o are three mandatory parameters, with the fourth one
   optional ParamNameWithValue with the value of 33

Available parameters (mandatory with *):

Parameter	Type	Description
IP or hostname*	String	IP address or hostname of the PBX. For example, `192.168.11.28`.
port*	Number	PBX port number. E.g. `8852`.
Expiration (s)*	Number	Connection expiration time.
Extension number length*	Number	For example, if the extensions have numbers like 331, 332, etc., they have a length of 3.
Username*	String	
Password*	String	
`TolerateCert`	boolean	Whether to ignore certificate validity (expired, self-signed, etc.)
`LongNamePrefix`	String	Corresponds to extension names. By convention, use extension long name. Usually `EXT`, i.e., you specify `LongNamePrefixEXT`.

For example:

192.168.1.176,0,20,2,fs-api,wsock,TolerateCert,LongNamePrefixEXT