



# FULL-FEATURED PBX FOR IP TELEPHONY

Redbox Platform provides a full-featured IP PBX solution that is designed to run in addition to other standard Redbox Platform offerings such as PCI security controls, VPN and POS applications. Redbox IP PBX runs in its own virtual machine, assuring security as well as that system resources are allocated as needed.

## BASED ON ASTERISK

The open source Asterisk IP PBX software is at the core of Redbox IP PBX. This very popular platform is the leading IP PBX solution worldwide, with more installed users than any of Cisco, Avaya or Nortel's solutions. Reliant adheres to the mainline Asterisk distribution, assuring compatibility and reliability.

## FEATURE RICH

Asterisk provides Redbox IP PBX with an extraordinary range of features, often exceeding those offered by much more expensive commercial solutions. The full list of features and configurable options is too long to list, but to put it simply, if Asterisk supports it, the Redbox IP PBX can generally support it as well.

## LOCAL AND RELIABLE

A key benefit of Redbox IP PBX is that it runs locally in the store on the hardened, reliable Redbox Platform. This means that, unlike cloud-based solutions, Redbox IP PBX will always provide phone services, even when the network is down. In addition, analog POTS lines can be directly attached to the Redbox Platform to ensure that phone services are always available.

## EXTENSIVE SIP SUPPORT

Redbox IP PBX supports most major SIP trunk types. Therefore, phone services can be delivered via large carriers either over the Internet or through a private network to a locally deployed Redbox Platform. SIP trunks are a fraction of the cost of POTS or PRI lines.

## NETWORK READY

Redbox IP PBX can run standalone or can be networked with other IP PBXs. This allows call forwarding, call transfers and dial plans to be established across an enterprise. Additionally, the underlying Asterisk IP PBX software can be integrated into other commercial IP and non-IP based PBXs, allowing retailers to transfer calls between store and headquarters or call center locations. Store-to-store and store-to-headquarters calls can be routed on a private network, further reducing costs.

## ENHANCED PHONE SERVICES

The standard enhanced telephony features of Asterisk are fully available on Redbox IP PBX, including:

Auto Attendant	Create a central auto attendant.
IVR	Route calls based on a menu-driven customer response system controlled by touch-tone selection. Establish customized voice prompts on a rules-driven basis.
Ring groups	Create ring groups to allow inbound calls to ring on one or more extension.
Call queues	Call queue support routes calls to specific extensions.
Voicemail	Voicemail and voicemail-to-email are fully supported.
Music on hold	Supports music on hold and custom music message.





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## STANDARDS AND ADDITIONAL TECHNICAL DETAILS

<b>VoIP Protocols</b>	H.323, Session Initiation Protocol (SIP), Media Gateway Control Protocol (MGCP) and Skinny Client Control Protocol (SCCP).
<b>Phones</b>	Virtually any standard SIP phone set from vendors such as Cisco, Polycom, Aastra, Yealink, Panasonic and Corelco can be used with the Redbox IP PBX.
<b>Power over Ethernet</b>	Most Redbox models do not have integrated power over Ethernet for providing power to phone sets, but we do integrate with PoE capable switches from Cisco, D-Link and NETGEAR and others. In addition, low cost power injectors can be used.
<b>POTS line support</b>	POTS (analog) line support is handled via a USB attached FXO interface. As many as eight POTS lines can be interfaced to a single Redbox. POTS lines are used as a primary or backup path for inbound or outbound calls, in the event wide area network connectivity is lost by the Redbox. Emergency (911) calls are typically routed over POTS lines to ensure location identification.
<b>Central Management</b>	The Redbox IP PBX can be centrally managed through the same tools that the overall Redbox configuration is managed. This means that configurations are not only maintained but also backed up centrally. Changes to phone system configuration can be pushed out automatically to an entire enterprise.
<b>Monitoring</b>	The performance and availability of the Redbox IP PBX is monitored centrally using the overall Redbox management environment. Alerts are managed centrally, as is log information.
<b>Local GUI Capacity</b>	Asterisk provides a local GUI for status, control, and reporting of the IP PBX. A typical Atom-based Redbox can support up to 20-30 handsets and an equal number of DID and DOD configured SIP trunks. Available storage within a 16GB CF flash card can hold several months worth of voicemail messages, in addition to all necessary configuration files. For central site and HQ systems we recommend standard server hardware.
<b>Call control and permissioning</b>	A variety of inbound and outbound call control settings are available including limiting destination based on number, area code, time of day and others. Outbound call permissions can also be controlled through the use of a PIN code.
<b>Deployment</b>	The core Asterisk IP PBX software is deployed and configured via Reliant central puppet based configuration system.
<b>Messages</b>	Custom messages, music on hold and messages/music on transfer can all be set up. There is native ability to create music on hold custom audio files and manage them either locally or centrally.

