

# ePSX FAQs

This section provides solutions to frequently asked questions (FAQs) about the Sonus SBC platforms and the ePSX.

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## Is the ePSX supported on all SBC platforms?

SBC Core support of ePSX is reflected in the table below.

 **Note**  
A minimum of 24 GB memory is required to use ePSX on SBC.

 = supported  = unsupported	SBC 5100	SBC 5110	SBC 5200	SBC 5210	SBC 7000	SBC SWe
ePSX Support						

## Are there services available to deploy the ePSX?

There are four ePSX deployment service offerings. These are packaged Enterprise service offerings for the deployment, design and testing of Enterprise SIP trunking with ePSX:

1. SBC HA Implementation with Standalone ePSX (no replication)
2. SBC HA Implementation with ePSX Replica
3. SBC Non HA Implementation with Standalone ePSX (no replication)
4. SBC Non HA Implementation with ePSX Replica

## How is the ePSX provisioned?

The Standalone ePSX is provisioned by the embedded management application (EMA) in SBC.

For a Replica ePSX, all database and provisioning changes are made on the Master PSX and transmitted to the Replica ePSX. The Master PSX requires a Sonus EMS in order to provision.

## Considering the ePSX runs on a virtual machine within the SBC server, is redundancy supported? If ePSX goes down, will a switchover happen?

The redundancy on the ePSX is similar to the SBC application. A switchover occurs at the box level only, i.e. the SBC application on one box cannot use the ePSX for policy queries on the redundant SBC server. When the ePSX on one box cannot provide services, an SBC (box-level) switchover is initiated.

## What are the two deployment options for ePSX?

The two ePSX deployment options are: Standalone ePSX and Replica ePSX.

- Standalone ePSX - Embedded PSX running on the SBC. The ePSX Database is provisioned using SBC's Embedded Management Application (EMA). Does not require an external PSX Master.
- Replica ePSX - Embedded PSX running on the SBC. Data is provisioned on an external Master PSX. ePSX Database is automatically synchronized with the external Master PSX.

## How do I calculate the number of calls per sec (cps) needed for the ePSX?

The cps on an SBC is calculated using the number of sessions on the SBC and the average call hold time of the customers' network.

$$\text{ePSX cps} = (\text{number of SBC sessions}) / \text{average call hold time}$$

The average call hold time for a conferencing provider is noticeably different than a typical Enterprise. Within the Enterprise market, Call Centers have different call hold times than other Enterprises. Care should be taken when calculating the cps metric which is the basis for all ePSX licenses.

## Is every ePSX cps tier splittable across multiple SBCs?

No, some tiers are not splittable. For 10, 25, 50 and 100 cps, licenses are purchased and installed on a box-by-box basis. Tiers above 100 cps can be split across SBCs in multiples of 100 cps.

For example, one can purchase 500 cps of the BASE ePSX license and allocate 200 cps to one SBC and 300 cps to another SBC. You cannot allocate 450 cps to one SBC and 50 cps to another. The allocation on a per box basis has to be in multiples of 100 cps.

## Are ePSX licenses enforced using the 'calls per second' licensing model?

Yes, when an ePSX is functioning as either a standalone ePSX or as a replica ePSX, then calls per second model is enforced. The cutoff is 10%. When the sessions per second amounts to more than 10%, the purchased calls per second license applies. Note that ERE calls per second are not currently enforced, so customers migrating from ERE to ePSX must ascertain their CPS needs.

## I have licenses for my SBC to access the Centralized PSX (e.g. POL-SBC5200-LIC1K). Is there an equivalent license for the SBC to access the local on-board ePSX (Standalone or Replica)?

No. There are no access licenses for the SBC to access the on-board ePSX. The cost of the BASE license includes the access license as well.

### **Does ePSX on one SBC support Diameter+ queries from another SBC?**

No. The ePSX can only support Diameter+ queries from its local on-board SBC application. It does not support Diameter+ queries from external devices.

### **Does ePSX support queries from 3rd party network elements?**

Yes. Only SIP Proxy and SIP Redirect interfaces are supported. ENUM Server and H.323 ingress interfaces are not supported on the ePSX.

### **Are LCR and Hosted LNP features supported on ePSX?**

No. There are a set of features like LCR, Hosted LNP, ENUM Server, H.323 Gatekeeper, CAMEL, GSM which are not available on the ePSX. Refer Routing Engines Comparison for more information.

### **Are there software dependencies between the SBC and the ePSX?**

Yes. The ePSX and SBC major releases will always be matched.

### **Since ePSX and SBC releases are matched, how does this impact sustaining release upgrades?**

Sustaining releases (SBC 4.0.x and ePSX 9.1.x) will be released independently and can be upgraded independently. For example, you can upgrade the SBC application to SBC 4.0.5R000 to obtain the latest SBC bug fixes without upgrading the ePSX software.

### **With ePSX being a second instance of the oracle DB on the standby SBC server, which ePSX is updated each time the Master PSX replicates to the replica ePSX (or is the data replicated from the active ePSX to the standby ePSX oracle DB)?**

The ePSX databases on each SBC box of an HA pair communicate and update over the HA link. The Master PSX updates only the active ePSX database; the replication of data to the inactive ePSX database occurs over the HA Link.

### **I received an error while applying the POL-BASE license. What do I do?**

If you receive the following error while applying the POL-BASE license, please ignore it. It simply indicates the ePSX has not yet started.

```
Error during ePSX license retrieval: LicenseMgmtFailException: PsxLicenseMgmtException: Connection refused.
```