

HSB IPBX Installation Guide

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Before you start

HSB IPBX installs itself from one ISO file in about 15 minutes, with no questions asked during setup. This guide covers version 1.0.3 on a virtual machine (VMware or Proxmox) or a physical server.

Item	Minimum	Recommended
Processor	2 cores, 64-bit	4 cores
Memory	4 GB	8 GB for call recording or more than 50 users
Disk	64 GB	128 GB or more for long call recordings
Boot mode	BIOS (legacy)	BIOS (legacy)
Network	1 network port with DHCP	DHCP reservation or static IP after install
Internet	Needed once, at first start	Permanent, for updates and license check-in

The whole disk is erased. Install HSB IPBX on a dedicated server or a new virtual machine, never on a computer that holds data you need.

You also need:

- A computer with Chrome or Edge on the same network, to open the web dashboard
- An email address, to receive your free license key
- For outside calls: a SIP trunk account from your telephone provider (server address, username and password)

Step 1 — Download and check the ISO

Download the installer from hsb-ipbx.com and confirm its MD5 checksum before installing, so you know the file arrived complete.

File	Size	MD5 checksum
HSB-IPBX-20-1.0.3.iso	3.5 GB	849ded45edab4cbc865b2815b90a4757

Check the checksum on your computer:

- **Windows** (PowerShell): `Get-FileHash .\HSB-IPBX-20-1.0.3.iso -Algorithm MD5`
- **macOS** (Terminal): `md5 HSB-IPBX-20-1.0.3.iso`
- **Linux**: `md5sum HSB-IPBX-20-1.0.3.iso`

The result must match the value above (upper or lower case doesn't matter). If it doesn't, download the file again — an interrupted download is the usual cause.

Step 2a — Install on VMware

These steps are for VMware Workstation; ESXi uses the same settings in its "New virtual machine" wizard.

1. **File → New Virtual Machine → Custom (advanced).**
2. Installer disc image file: choose `HSB-IPBX-20-1.0.3.iso`. If VMware offers "Easy Install", choose **I will install the operating system later** instead, then attach the ISO under *CD/DVD* afterwards.
3. Guest operating system: **Linux → Ubuntu 64-bit.**
4. Firmware type: **BIOS** (not UEFI).
5. Processors: **2** or more. Memory: **4096 MB** or more.
6. Network: **Bridged** — the PBX needs its own address on your office network so phones can reach it.
7. Disk: **64 GB** or more, stored as a single file.
8. Finish, then **Power on.**

Don't press any key: the installer starts by itself, installs everything and restarts the machine. Continue with **First start** below.

Step 2b — Install on Proxmox VE

1. Upload the ISO: select your storage (for example **local**) → **ISO Images** → **Upload** → choose `HSB-IPBX-20-1.0.3.iso`. Or use **Download from URL** with `https://download.hsb-ipbx.com/HSB-IPBX-20-1.0.3.iso`.

2. **Create VM** → give it a name such as `hsb-ipbx`.
3. **OS**: ISO image `HSB-IPBX-20-1.0.3.iso`, type **Linux**, version **6.x – 2.6 Kernel**.
4. **System**: BIOS **SeaBIOS** (default), machine **Default (i440fx)**.
5. **Disks**: **64 GB** or more.
6. **CPU**: **2 cores** or more, type **host**.
7. **Memory**: **4096 MB** or more.
8. **Network**: bridge **vmbr0** (the bridge connected to your office network), model **VirtIO**.
9. Finish, select the VM → **Start** → open **Console** to watch.

Let it run without pressing any key; it installs and restarts by itself. After the restart, remove the ISO under **Hardware** → **CD/DVD Drive** → **Do not use any media**.

Step 2c — Install on a physical server

1. Use a USB stick of **8 GB** or more (everything on it is erased).
2. Write the ISO to it:
 - **Windows**: [Rufus](#) → select the stick and the ISO → partition scheme **MBR**, target system **BIOS (or UEFI-CSM)** → **Start** → choose **Write in DD Image mode** if asked.
 - **Windows, macOS or Linux**: [balenaEtcher](#) → **Flash from file** → select the stick → **Flash**.
3. In the server's firmware setup, enable **Legacy / CSM boot** and set the USB stick as the first boot device.
4. Connect the server to your office network with a cable, insert the stick and power on.
5. Don't press any key. When the server restarts after installing, remove the USB stick so it starts from its own disk.

Step 3 — First start

After the installer restarts the machine, HSB IPBX needs about **3 more minutes** to finish setting itself up in the background. During this time it creates its own security certificates and passwords, prepares the phone system, starts the services and registers with the HSB license service. The machine must be connected to the internet for this first start; without internet, setup simply tries again at the next restart.

When it's ready, the screen shows the HSB logo and the **web dashboard address**, for example `https://192.168.1.50:8080`. Write it down.

The console menu

You don't need the server screen for daily work, but it offers a simple service menu. Log in with:

- Username: **hsbadmin**
- Password: **ChangeMe-HSB-2026** — change it right away with option 6

Option	What it does
1	Refresh the status screen
2	Restart the web service
3	Restart the phone system (active calls are dropped)
4	Show which phones are registered
5	Show the network address, gateway and DNS
6	Change the console password
7	Restart the server
8	Shut down the server
0	Log out

The console gives access to this menu only. System files are protected, and any change to the system itself is made by Hidden Systems Security support.

Step 4 — First web login

1. On a computer in the same network, open Chrome or Edge and go to the dashboard address, for example `https://192.168.1.50:8080`.
2. The browser warns that the connection isn't private. This is expected: every HSB IPBX creates its own certificate during setup. Click **Advanced** → **Continue to ... (unsafe)**. You only need to do this once per browser.
3. Sign in with username **admin** and password **ChangeMe-Admin-Password!**
4. A window asks you to choose a new admin password (at least 10 characters). Choose a strong one and keep it safe — it protects your whole phone system.

You now see the **System Status** dashboard. A yellow bar at the top says the PBX isn't registered yet; the next step removes it.

You can switch between the **Classic** and **Modern** dashboard look at any time with the **Appearance** button in the top bar.

Step 5 — Register and activate your free license

Until it's registered, HSB IPBX works with **2 extensions and 1 trunk**. Free registration unlocks **HSB IPBX-20**: 20 extensions, 4 trunks and 5 call center agents, with every feature included.

1. Click **Register free** in the yellow bar, or open **Maintenance → License**.
2. Enter your company name, contact name, email address and phone number → **Get my free license key**.
3. Your key arrives by email from **license@hiddensystemssecurity.com** within a few minutes. Check the spam folder if you don't see it, or click **Send it again** on the License page.
4. Enter the key (format `XXXXXX-XXXXX-XXXXX-XXXXX`) → **Activate**.

The model changes to **HSB IPBX-20**, the yellow bar disappears, and the License page shows your usage. Each key works on one PBX only.

Upgrading to more users

Model	Extensions	Trunks	Call center agents	Extras
HSB IPBX-20 (free)	20	4	5	All PBX features
HSB IPBX-50	50	8	15	Cloud remote access, integrations (coming soon), priority support
HSB IPBX-100	100	16	30	Cloud remote access, integrations (coming soon), priority support
HSB IPBX-200	200	32	60	Cloud remote access, integrations (coming soon), priority support

To upgrade, click **Request upgrade** on the License page or email license@hiddensystemssecurity.com. Enter the key you receive under **Upgrade key** → **Activate**. The new limits apply immediately and every setting stays as it is.

Network and firewall checklist

Keep the PBX address fixed. Phones and agents connect to it by its IP address, so reserve that address for the PBX in your router's DHCP settings (a *DHCP reservation*) right after installing.

Ports HSB IPBX uses:

Port	Protocol	Used for	Open to the internet?
8080	TCP	Web dashboard and HSB-Call Wave (HTTPS)	No — office network only
8089	TCP	Encrypted WebRTC for HSB-Call Wave	No — office network only
5060	UDP	SIP phones and SIP trunk	Only if remote phones must connect; then turn on GeolIP
5061	TCP	SIP over TLS	Only if used
10000–20000	UDP	Call audio (RTP)	Only together with 5060
8181	TCP	Phone provisioning	Never — office network only
22	TCP	Support access (SSH)	Never

For a SIP trunk, the PBX only makes **outgoing** connections to your provider, so no port forwarding is normally needed.

Never forward the web dashboard (8080) or SSH (22) to the internet. Before exposing any SIP port, turn on the firewall under **System** → **Security Center** → **Firewall**, and limit SIP to your country under **GeolIP Policy**.

Troubleshooting

Problem	What to check
The installer asks questions or shows a language menu	Someone pressed a key at start-up. Restart the machine and don't touch the keyboard.
The installer doesn't start	Boot mode must be BIOS / Legacy , not UEFI. On VMware set <i>Firmware: BIOS</i> ; on Proxmox use <i>SeaBIOS</i> .
The machine starts the installer again after installing	Remove the ISO or USB stick, then restart.
No address shown on the screen	The network has no DHCP, or the VM network isn't bridged. Check the cable or VM network setting, then restart.
The dashboard page doesn't open	Use https:// and port :8080 . Wait 3 minutes after the first restart. Make sure your computer is in the same network.
"Unauthorized" when signing in	First start isn't finished yet — wait a few minutes and try again. Check the password: ChangeMe-Admin-Password! with the exclamation mark.
"Could not reach the HSB license service"	The PBX has no internet access. Check the gateway and DNS with console option 5.
The license email doesn't arrive	Check spam, then click Send it again on the License page. If it still doesn't arrive, email license@hiddensystemssecurity.com with your company name.
"This license key is already activated on another PBX"	Each key works on one PBX. After a reinstall, ask us to release the key.
Phones don't register	Check the extension number and password, and that the phone uses the PBX address shown on the console. Use console option 4 to see registered phones.

When you contact support, include the **Device ID** shown on the License page and the version shown under **Maintenance → Upgrade**.

Next steps and support

Your PBX is installed and licensed. Next, add your SIP trunk, extensions, inbound route, voice menu and call queues — the **Administrator quick start** guide walks through each one.

Software updates appear under **Maintenance → Upgrade**; each one takes a backup first and rolls back by itself if needed.

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