

OVERVIEW & REQUIREMENTS

This guide walks through configuring the **Grandstream GXP2170** IP phone to register with **the PBX platform 4.1.3** — from installation through manual configuration and auto provisioning (DHCP, TFTP, HTTP/HTTPS).



Grandstream GXP2170 IP phone

BEFORE YOU BEGIN

- **Device model** — Confirm the exact model on the back of the device
- **Firmware** — Version **1.0.9.26**
- **DHCP** — A fully configured, operational DHCP server
- **PBX version** — Release **4.1.3**

CHECK DEVICE FIRMWARE

- 1 Browse to the device's IP, e.g. `http://192.168.1.22`
- 2 Log in (factory default: `admin / admin`)
- 3 The firmware version is displayed on the status page

FIND DEVICE IP ADDRESS

- 1 Press the **Home** button on the phone
- 2 Go to **Status** > **Network status** > **Ethernet** — the IP is shown under **IPv4**

CHECK PBX VERSION

- 1 Log in to the PBX platform, navigate to **Settings > About**

```
Edition: Business, Release: 4.1.3.0  
(387597b7), Running: 16.16.1-gc-c0d40968, Proxy  
v4.1.3 (62b7bcd), API: 6
```

INSTALLATION

OPTION A — POWER ADAPTER

- 1 Connect the DC plug on the power adapter to the DC port on the device, and the other end into an electrical outlet
- 2 Connect an Ethernet cable between the **Internet** port on the device and a network port on your router or switch

NOTE: If using PoE, you do not need the AC adapter. Ensure the Ethernet cable and router/switch are PoE compliant.

OPTION B — POWER OVER ETHERNET (POE)

- 1 Connect an Ethernet cable between the **Internet** port on the device and an available port on a PoE-compliant router or switch

RESET TO FACTORY SETTINGS

Not required for brand-new devices — but a **must** for any device previously used.

- 1 Browse to the device's IP, e.g. <http://192.168.1.22>
- 2 Log in (factory default: admin / admin)
- 3 Click **Maintenance** in the top navigation menu
- 4 Click **Factory Reset** in the left navigation menu
- 5 Click **Reset** in the Configure WEB UI section — the device resets and reboots

WARNING: Do not unplug or remove power while the device is updating firmware or configuration.

MANUAL CONFIGURATION — UAD SETTINGS

- 1 Browse to the PBX platform, e.g. <http://192.168.1.10>, and log in
- 2 Navigate to **Settings > UAD**
- 3 Click the **Edit** icon for the Grandstream device
- 4 Set **Status** = **Active**, **Auto provisioning** = **No**, **DHCP** = **Yes**
- 5 Click **Save**

The screenshot shows the 'UAD settings — manual configuration' page for a Grandstream GXP-2160 device. The 'General' tab is active. Under 'DTMF Mode', 'rfc2833' is selected. 'Context' is 'default'. 'Status' is set to 'Active'. 'Internal UAD name for Auto-Provisioning' is 'gxp2000'. Under 'Network Related', 'Transport' is 'UDP', 'Encryption' is 'No', 'NAT' is 'Default (rport)', 'Direct media' is 'No', 'Direct RTP setup' is 'No', and 'Qualify' is '2000'. Under 'Call Properties', 'Ringtime' is '32', 'Incoming Dial Options' is 'tr', and 'Outgoing Dial Options' is empty. Under 'Channels', 'Incoming Limit' is '12', 'Outgoing Limit' is '12', and 'Busy level' is empty. Under 'Codecs', 'Disallow: all' is checked, and 'Allow' has 'G.711 ulaw' and 'G.711 alaw' checked. Under 'Video Support', 'Auto-Framing (RTP Packetization)' is 'No', and 'Auto provisioning' is 'No'. Under 'Presence', 'Presence Enabled' is 'Yes'. The 'Save' button is highlighted.

MANUAL CONFIGURATION — EXTENSION & REGISTRATION

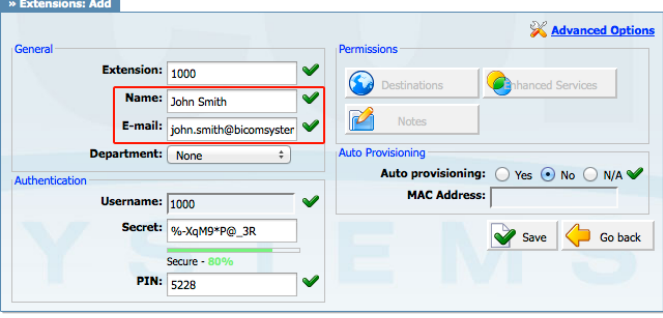
CREATE THE EXTENSION

- 1 **Extensions** > **Add Extension** > UAD = Grandstream GXP2170, Location = Local or Remote > **Next step**

REQUIRED EXTENSION FIELDS

- Name — e.g. John Smith
- E-mail — e.g. john.smith@yourdomain.com
- Department — e.g. Sales

Click **Save**.



Creating the extension

REGISTER THE PHONE

- 1 Browse to the phone's IP, log in (username: admin , password: shown on back of phone)
- 2 Click **Accounts** tab > **Account 1** > **General Settings**
- 3 **Account Active** = Yes
- 4 **Account Name** — the Extension name, e.g. John
- 5 **SIP Server** — PBX hostname or IP, e.g. voip.yourdomain.com or 192.168.1.10
- 6 **SIP User ID** — the Extension number, e.g. 1003
- 7 **Authenticate Password** — the extension Secret, e.g. _%Z4M3*Ts9y7
- 8 Click **Save and Apply**

VERIFY: Dial *123 to confirm registration.

AUTO PROVISIONING

1 UAD SETTINGS

- 1 Log in to the PBX platform, navigate to **Settings > UAD**
- 2 Click **Edit** for the Grandstream device, set **Status** = **Active**, **Auto provisioning** = **Yes**, **DHCP** = **Yes**, click **Save**

UAD settings — auto provisioning

2 CREATE THE EXTENSION

- 1 **Extensions** > **Add Extension** > UAD = **Grandstream GXP2170**, Location = Local or Remote > **Next step**

REQUIRED EXTENSION FIELDS

- **Name** — e.g. John Smith
- **E-mail** — e.g. john.smith@yourdomain.com
- **Auto Provisioning** — set to **Yes**
- **MAC Address** — from the back of the device, e.g. 000B82123456

Click **Save**.

3A REGISTER VIA DHCP (OPTION 66)

- 1 Configure your DHCP router to use **option 66**. On first boot or reboot, the device picks up its configuration automatically. Dial ***123** to verify.

3B REGISTER VIA TFTP, HTTP, OR HTTPS

- 1 Browse to the device's IP, log in (**admin** / **admin**)
- 2 Click **Maintenance** > **Provisioning**
- 3 Enter auto-provisioning username and password in the **HTTP/HTTPS User Name** and **HTTP/HTTPS Password** fields
- 4 In the **Provisioning via** dropdown, select TFTP, HTTP, or HTTPS
- 5 In the **Config Server Path** field, enter the appropriate address (see formats below)
- 6 Click **Save and Apply**, then click **Reboot** in the top right
- 7 Wait for the configuration to update. Dial ***123** to verify.

CONFIG SERVER PATH FORMATS

- **HTTP / HTTPS** — **abc.yourdomain.com/prov** or **192.168.1.10/prov**
- **TFTP** — **voip.yourdomain.com** or **192.168.1.10**

Do **not** include the protocol prefix (**http://**, **tftp://**) — the **Provisioning via** dropdown handles this.