

Mixel PBX — Operational Handbook

How to set up and run your Swiss cloud phone system

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Mixel PBX – Operational Handbook

This handbook is written for the person who just received an invite to a new Mixel PBX workspace, plus the colleagues they will invite afterwards. Read it once front-to-back during onboarding (about 30 minutes), then refer back to the relevant section when you need to change something.

The handbook covers the live platform only. Forward-looking items — Microsoft Teams certified Direct Routing, native mobile apps, Stripe self-serve checkout, white-label theming — are listed in section 12 with their target quarter.

1. Activate your account (5 minutes)

Once Mixel has created your tenant, the person you nominated as administrator receives an email titled:

Welcome to Mixel PBX – activate your workspace

The email contains a single activation link of the form:

```
https://pbx.mixel.ch/console/setup-invite/?token=<one-time-token>
```

The link is valid for **7 days**. If it expires before you click it, reply to the welcome email and we will reissue.

When you open the link:

1. You set a password. Rules: minimum 12 characters, must include at least one lowercase letter, one uppercase letter, and one digit.
2. The platform creates your administrator account inside your tenant.
3. You land on the setup wizard described in the next section.

If you ever need to come back later, sign in at <https://pbx.mixel.ch/> with the email address from the welcome message and the password you just set.

2. Setup wizard, step by step

The wizard runs once per tenant. It has seven steps and you can pause and resume at any point — your progress is saved after each step.

#	Step	What it asks	What happens behind the scenes
1	Welcome	Confirm the company name and address.	Stamps the tenant record.
2	Country & timezone	Pick your country (default Switzerland) and timezone (default Europe/Zurich).	Drives default caller-ID format, time-condition defaults, and invoice locale.
3	First user	Your name, email, extension number.	Creates your admin user (already done if you set the password in step 1; this confirms extension assignment).
4	First DID	An inbound number in E.164 format (for example <code>+41445550100</code>).	Creates the inbound number record so calls can land.
5	First IVR	Choose a starter template (single-greeting auto-attendant) or skip.	Creates a routable voice app you can edit later in the IVR designer.
6	First SIP trunk	Pick your carrier from the preset list and supply the auth credentials.	Stores the trunk with encrypted password, then runs a live registration test.
7	Done	Summary screen.	Marks the wizard complete and routes you to the admin dashboard.

After step 7 you can revisit any setting individually from the relevant page in [Admin > ...](#) .

3. Add your first user

Path: </console/users/> → click **+ Add user**.

Fields:

- **First name** and **last name** — appears in caller ID and the directory.
- **Email** — the sign-in identity. Must be unique within your tenant.

- **Role** — one of:
 - **admin** — full access to `/console/*` pages plus `/user/*` .
 - **technician** — read-only access to `/tech/*` for diagnostics, plus `/user/*` . Cannot change tenant configuration.
 - **user** — access to `/user/*` only (call history, voicemail, contacts, messages, personal call settings).
- **Extension number** — internal number colleagues dial to reach this person. Pick any unused number; 3 or 4 digits is conventional.
- **Hot-desk PIN** — 4 to 8 digits. The user enters this at any registered desk phone (`*99` to log in, `*98` to log out) to make that phone become their extension for the session.
- **Mobile twin number** — optional E.164 number that rings in parallel with the desk extension on inbound calls.

Click **Save**. The new user appears in the list immediately.

Note on first-time passwords: until SMTP-based invitation emails are wired up (planned), the platform does not email a password to the new user. Generate a temporary password yourself, share it out-of-band (verbally, secure password manager link, or sealed envelope), and instruct the user to change it on first sign-in via the avatar dropdown → **Account & password**.

4. Connect your phone line (SIP trunk)

A SIP trunk is the connection between Mixel PBX and your telephony carrier — the equivalent of plugging an ISDN cable into the old PBX. Without a trunk, you cannot make or receive PSTN calls.

Path: `/console/routing/` → **SIP Trunks** tab → + **New trunk**.

Carrier presets

Pick one of the eight presets and the host, port, and codec defaults auto-fill:

Carrier	Host	Port	Auth method
Swisscom Smart Business Connect	sip.swisscom.ch	5060	Register
Sunrise Business Voice	sip.sunrise.ch	5060	Register
iWay SIP-Trunk	sip.iway.ch	5060	Register
Salt Business Voice	sip.salt.ch	5060	Register
Twilio Elastic SIP	yours.pstn.twilio.com	5060	IP-auth
Telnyx	sip.telnyx.com	5060	IP-auth
sip2sip.info (test)	sip2sip.info	5060	Register
Custom	—	—	Configure manually

Remaining fields

- **Username and password** — provided by your carrier. The password is encrypted at rest with pgcrypto on save and never displayed again in plain text.
- **Outbound caller ID** — the E.164 number the called party will see. Must be a number you are entitled to present (most carriers verify this).
- **Maximum concurrent channels** — soft cap on simultaneous calls over this trunk. Set to your carrier-allocated channel count.
- **Codecs** — defaults to `OPUS, G722, PCMA, PCMU` which is the right answer for almost every European carrier.

Test the connection

After **Save**, click **Test connection** in the trunk row. The platform performs a real registration probe against the carrier and shows:

- **Green tick** — registered; you can now make and receive calls.
- **Red cross** — registration failed. The error message indicates whether it's credentials, network, or the carrier rejecting your IP.

5. Add an inbound number (DID)

A DID (Direct Inward Dial) is a phone number the public dials to reach your business. Each DID points to one destination inside the PBX.

Path: </console/routing/> → **Inbound DIDs** tab → **+ New DID**.

Fields:

- **Number** — in E.164 format with leading **+** (for example **+41445550100**).
- **Description** — free text for your own reference (for example “Reception line”, “Sales hotline”).
- **Destination type** — one of:
 - **Extension** — rings a single user.
 - **Ring group** — rings several users with the chosen strategy.
 - **Queue** — places callers in an ACD queue with hold music.
 - **IVR** — plays a menu and routes by digit press.
 - **Time condition** — routes differently inside vs. outside business hours.
 - **Voicemail** — drops the caller straight into a mailbox.
 - **External number** — forwards to a PSTN number (uses outbound minutes).
- **Destination** — the specific item of the chosen type.

Click **Save**. The DID is live the moment the carrier delivers a call to it.

6. Build your first IVR

An IVR (Interactive Voice Response) is the menu callers hear: “Press 1 for sales, 2 for support...”.

Path: </console/voice-apps/> → **IVR Designer**.

The designer is a drag-and-drop canvas (built on ReactFlow):

1. Click **+ New IVR**, give it a name.
2. The canvas opens with a single **Start** node.
3. Drag a **Greeting** node from the palette and connect Start → Greeting. Choose a pre-uploaded audio file (upload at [Admin > System > Audio](#)) or use the built-in text-to-speech.
4. Drag a **Wait for digits** node and connect Greeting → Wait. Configure the timeout (seconds before falling through) and the maximum digit count (usually 1).
5. For each menu option, drag a **Branch** node, set its trigger digit, and connect Wait → Branch.
6. Each branch terminates in a destination: **Extension, Ring group, Queue, Voicemail, or External number**.
7. Click **Save**. The IVR is now selectable as a destination in [Admin > Routing > Inbound DIDs](#) .

Tip: keep your top-level IVR shallow (3–5 options). Nest sub-menus only when call volume justifies them.

7. Daily user features

These are the pages a regular user (role `user`) sees. Administrators have the same pages under `/user/*` in addition to their console.

Browser softphone

A floating circular button sits at the bottom-right of every page. Click it to expand the softphone panel.
Status indicator:

- **Green dot** — registered, ready to call.
- **Yellow dot** — registering / reconnecting.
- **Red dot** — not registered. Check your microphone permissions in the browser.

You can dial by typing into the keypad or by clicking a number anywhere in the UI (history, contacts, voicemail).

Voicemail

Path: `/user/voicemail/`. Inline audio player on each row. If voicemail transcription is enabled for your tenant, the AI-transcribed text appears beneath the player. Mark as read or delete with confirmation.

Contacts

Path: `/user/contacts/`. Personal directory with name, multiple phone numbers, email, company, and free-form notes. Search by name, number, or company. Click a contact's number to dial.

Conference rooms

Path: `/user/conference/`. Create a new room with one click; the platform generates a shareable invite link that participants join from any browser. Up to ~50 participants per room is the supported scale.

Call settings / forwarding

Path: `/user/settings/`. Set three independent forwarding rules for your own extension:

- **Unconditional** — always forward incoming calls to the chosen number.
- **Busy** — forward only when you are already on a call.
- **No-answer** — forward after N seconds (configurable timeout) when you don't pick up.

Change your password

Avatar dropdown (top-right) → **Account & password**. Current password required for confirmation. Same complexity rules as the original activation: ≥12 characters, mixed case and digits.

8. For technicians

Users with the `technician` role see a separate workspace at `/tech/*`. Everything here is **read-only on tenant configuration**. Technicians diagnose; only administrators change settings.

Page	Path	What it shows
Tech Dashboard	<code>/tech/</code>	Summary of trunk state, active calls, recent events.
SIP Trunks	<code>/tech/trunks/</code>	Carrier registration state, channels in use. Cross-check with <code>Admin > Routing > SIP Trunks</code> .
System Logs	<code>/tech/logs/</code>	Filterable timeline of platform events. Always use the level filter (<code>info</code> / <code>warn</code> / <code>error</code>) and a tight time range; the unfiltered view is verbose.
Diagnostics	<code>/tech/diagnostics/</code>	Latency, registration counts, sipd <code>healthz</code> , fraud event feed. Capture this output when escalating to support.
Devices	<code>/tech/devices/</code>	Which extensions are registered, source IP, last refresh time.

If a trunk shows **DOWN** in `Tech > SIP Trunks` but the admin sees it as **Active**, the carrier has lost registration — ask the admin to open `Admin > Routing > SIP Trunks` and click **Test connection**.

9. Billing

Path: `/console/billing/`.

Plans

Plan	CHF / month	Outbound minutes	Users
Starter	19	100	5
Business	49	500	25
Enterprise	199	Unlimited	Unlimited

How invoicing works

- Invoices arrive by email from info@mixel.ch once per month.
- Each invoice is a PDF with a **Swiss QR-bill** payment slip.
- Pay by bank transfer using the QR code (any Swiss banking app reads it directly).
- There is no credit card on file, no automatic charge, no Stripe surcharge.
- Update your billing email at </console/billing/> → **Billing details**.

Invoice status pills

Pill	Meaning
Paid (green)	Payment received and reconciled.
Sent (blue)	Issued and emailed; payment pending.
Overdue (red)	Past due date; service may be limited if it stays unpaid.
Draft (gray)	Generated but not yet sent.
Void (struck-through)	Cancelled and replaced; ignore.

10. Security and toll-fraud guards

International toll fraud is the single biggest financial risk on any cloud PBX. Mixel ships three independent guards on by default; tune them at </console/security/>.

Country allowlist

Outbound PSTN calls are permitted only to countries in the allowlist. Defaults are EEA + Switzerland + United Kingdom + a small set of common business destinations. Add or remove countries by **ISO-2 code** (CH, DE, FR, IT, US, ...).

Daily outbound budget (EUR)

A per-tenant cap on the cost of outbound PSTN calls in any 24-hour window. When the budget is exceeded, outbound is automatically blocked until midnight UTC or until you click **Unlock outbound** (see below). Inbound continues unaffected.

Per-minute rate limit

A maximum number of new outbound call attempts per minute. Catches the classic toll-fraud pattern where a compromised extension dials hundreds of premium-rate numbers in seconds.

Fraud event log

The page shows the **last 50 fraud events** — blocked-country attempts, budget breaches, rate-limit hits — with timestamp, extension, destination, and reason.

Unlock outbound

If a legitimate burst of activity (a real call campaign, a busy support day) trips the budget guard, click **Unlock outbound**. This re-enables outbound for the rest of the day. The button can be used a maximum of **2 times per 24 hours** before the operator (Mixel) must intervene — that ceiling exists to make sure a real attack can't simply be unlocked away.

11. Ask Mixail (AI assistant)

The orange pill at the bottom-right of every page reads **Ask Mixail**. Clicking it opens a chat panel.

Mixail is **tenant-grounded**: it answers questions about your tenant's data and about how to use Mixel PBX. It does not answer general-purpose questions, and it cannot see other tenants' data.

Examples of questions Mixail handles well:

- “How many calls did we handle today?”
- “Who's the longest-tenured agent in the support queue?”
- “Where do I add a new IVR?”
- “Are any calls in the queue right now?”
- “What's the average MOS on the Swisscom trunk this week?”

Powered by a local Qwen 2.5 14B model running on Mixel's Swiss GPU infrastructure. Your prompts and Mixail's responses **never leave the platform** — there is no OpenAI or Anthropic call in the data path.

12. Roadmap

Items planned for the second half of 2026:

- 🚧 **Stripe self-serve subscription checkout** — Q3 2026.
- 🚧 **Microsoft 365 / Google Workspace calendar pop on inbound** — Q3 2026.
- 🚧 **Salesforce / HubSpot CRM screen-pop on inbound** — Q3 2026.
- 🚧 **Microsoft Teams Direct Routing (Microsoft-certified)** — Q4 2026.
- 🚧 **Native iOS app with Apple Push Notifications** — Q4 2026.
- 🚧 **Native Android app with FCM push** — Q4 2026.
- 🚧 **White-label per-tenant theming** (logo, colors, custom domain) — Q4 2026.

Status updates appear on <https://pbx.mixel.ch/docs/> as items ship.

13. Support

- **General product questions and bug reports:** support@mixel.ch .
- **Billing questions:** billing@mixel.ch .
- **Urgent incidents:** call the operator-assigned number that was provided to your administrator at activation.

When you contact support about a call quality or routing issue, please include:

1. The approximate time the issue occurred (with timezone).
2. The DID or extension involved.
3. A screenshot of [Tech > Diagnostics](#) if you have a [technician](#) user.

That triage information shaves hours off the resolution.

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