

MAXEN

IT Portal

Deployment Guide

Self-hosted IT infrastructure platform · White-label licensed

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Deployment Docker Compose / bare metal	Coverage Server · SSL · DB · Auth · Extension	Support support@maxen.world
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1 What is IT Portal?

OVERVIEW

IT Portal is a **self-hosted IT management platform** that replaces Excel-based agent tracking with a secure, role-based web application. It runs entirely on your client's servers — client data never leaves their infrastructure.

Feature	Description
Agent Cards	Central source of truth for every employee: credentials, status, auth method, machine binding
Resource Vault	AES-256-GCM encrypted passwords. Agents launch apps via one-time tokens — password never exposed
Floor Plan	Interactive office map with drag-and-drop seating. Triggers machine UUID rebinding on moves
OTP + Passkey Auth	Email OTP for login, WebAuthn/Passkey for 2nd factor. PIN fallback for KVKK compliance
Machine Binding	Chrome Extension ties each login to a specific workstation via hardware-derived UUID
Audit Log	Every action logged with actor, target, machine UUID, IP, and timestamp
Admin Panel	Full CRUD on agents, roles, brands, machines, sessions, IP policies
HR Portal	Separate subdomain for HR onboarding — new employee forms flow into pending agent cards
White-label	All colours, names, and branding via config.json. No hardcoded company references

2 Server Requirements

INFRASTRUCTURE

Requirement	Minimum	Recommended
CPU	2 vCores	4+ vCores
RAM	2 GB	4–6 GB
Disk	20 GB SSD	100 GB SSD
OS	Ubuntu 22.04	Ubuntu 22.04 / 24.04 LTS
Node.js	20 LTS	22 LTS
PostgreSQL	14	16
Redis	6	7
Docker	24+	27+ (Compose v2)

Requirement	Minimum	Recommended
Nginx	1.18	1.24
SSL	Let's Encrypt	Wildcard cert for HR subdomain
Ports open	80, 443	22 restricted to your IP only

NOTE

Cherry Servers VPS 6 GEN 2 (~€15/mo): 6 vCores, 6 GB RAM, 100 GB SSD handles up to ~200 concurrent agents comfortably.

3 Pre-installation Checklist

CHECKLIST

- **Domain** — A records pointing to your server IP for portal.yourdomain.com and hr.yourdomain.com
- **SSH access** — Root or sudo access to your VPS
- **Resend API key** — Free account at resend.com — needed for OTP emails. Verify your sender domain.
- **License key** — Received from MAXEN Vendor Dashboard (format: ITP-XXX-XXXX-XXXX-XXXX)
- **SSL email** — An email address for Let's Encrypt certificate registration
- **Chrome** — Chrome or Chromium installed on each workstation (for the Chrome Extension)

4 Docker Deployment (Recommended)

DOCKER

1 Install Docker & Compose

```
# Install Docker (Ubuntu)
curl -fsSL https://get.docker.com | sh
sudo usermod -aG docker $USER

docker --version && docker compose version
```

2 Clone the repository

```
git clone https://github.com/yourorg/it-portal.git /opt/it-portal
cd /opt/it-portal
```

3 Configure environment

```
cp .env.example .env
nano .env # fill in all required values – see Section 5
```

4 Start all services

```
docker compose up -d

# Check status
docker compose ps
docker compose logs -f app
```

5 Run database migrations

```
docker compose exec app node src/db/migrate.js
```

INFO

Migrations are idempotent — safe to run multiple times.
Always run after updating to a new version.

5 Environment Configuration (.env)

[CONFIG](#)

Copy `.env.example` to `.env` and set every value below. Never commit `.env` to version control.

Variable	Description / Example
DATABASE_URL	postgresql://itportal:PASSWORD@localhost:5432/itportal
REDIS_URL	redis://localhost:6379
SESSION_SECRET	64-char hex → openssl rand -hex 32
AES_KEY	64-char hex (AES-256) → openssl rand -hex 32
MACHINE_SALT	64-char hex → openssl rand -hex 32 (never change after deploy)
LICENSE_KEY	ITP-XXX-XXXX-XXXX-XXXX ← from MAXEN Vendor Dashboard
LICENSE_SERVER_URL	https://vendor.maxen.world
RP_ID	portal.yourdomain.com (WebAuthn relying party — no https://)
RP_ORIGIN	https://portal.yourdomain.com
RP_NAME	IT Portal (shown in passkey dialogs)
RESEND_API_KEY	re_xxx ← from resend.com
EMAIL_FROM	noreply@yourdomain.com (must be verified sender in Resend)
PORT	3000 (internal; Nginx proxies externally)
NODE_ENV	production

OTP_TTL_MINUTES	10
OTP_MAX_ATTEMPTS	5
OTP_MAX_PER_HOUR	3

NOTICE

MACHINE_SALT must never change after first deployment.
Changing it invalidates all existing machine UUID bindings.

6 Database & Migrations

DATABASE

IT Portal uses **PostgreSQL 16** with sequential numbered migrations (001_brands through 012_field_definitions). Docker Compose manages the database container automatically.

1 Docker — database starts automatically

```
# postgres container defined in docker-compose.yml
# Data persisted in Docker volume: postgres_data
docker compose up -d postgres
```

2 Bare metal PostgreSQL

```
sudo apt install postgresql-16
sudo -u postgres psql
    CREATE USER itportal WITH PASSWORD 'YOURPASSWORD';
    CREATE DATABASE itportal OWNER itportal;
    \q

# Run migrations in order
sudo -u postgres psql -d itportal -f src/db/migrations/001_brands.sql
# ... repeat for 002 through 012
```

7 Nginx + SSL Setup

SSL

```
# Install Nginx + Certbot
sudo apt install nginx certbot python3-certbot-nginx -y

# Copy config and edit domain
sudo cp nginx/portal.conf /etc/nginx/sites-available/it-portal
sudo ln -s /etc/nginx/sites-available/it-portal /etc/nginx/sites-enabled/
sudo nano /etc/nginx/sites-available/it-portal

# Issue SSL certificates
sudo certbot --nginx -d portal.yourdomain.com -d hr.yourdomain.com

# Test and reload
sudo nginx -t && sudo systemctl reload nginx
```

INFO

Certbot auto-renews via systemd timer. Verify: `sudo certbot renew --dry-run`

8 First Login & Setup Wizard**SETUP**

On first startup, visit <https://portal.yourdomain.com/setup>. The wizard is automatically disabled after completion.

Step	Action	Details
1	License verification	Enter LICENSE_KEY. Portal pings vendor.maxen.world to activate.
2	Create Super Admin	Set the first super_admin email. OTP sent to verify ownership.
3	Configure branding	Set company name, logo, and primary colour (config.json).
4	Create first brand	Add at least one brand before creating agent cards.
5	Test OTP flow	Wizard sends a test email to confirm Resend is working.
6	Complete	Wizard locked. Login screen activates. Share portal URL with IT team.

9 Chrome Extension Setup**EXTENSION**

The extension injects **X-Machine-UUID** on every portal request (machine binding) and handles Resource Vault autofill via one-time tokens.

1 Install extension

```
# Chrome → chrome://extensions
# Enable Developer mode (top right toggle)
# Load unpacked → select the /extension folder
# Copy the Extension ID shown (e.g. abcdefghijklmnop)
```

2 Run machine setup (PowerShell — run as Administrator)

```
.\setup.ps1 -ExtensionId "abcdefghijklmnop"

# If execution policy is restricted, use the .reg alternative:
# Edit setup.reg with SERIAL and HOSTNAME, then double-click
```

3 Approve machine in Admin Panel

After the agent logs in, an **REQ-XXXX** code appears on screen. IT Admin goes to **Admin Panel** → **Machines** and approves the request.

INFO

1 UUID per agent (it_agent, team_lead). floor_admin gets 2 UUIDs. it_admin / super_admin have no limit.

10 License Activation

[LICENSE](#)

IT Portal validates the license at vendor.maxen.world/validate every 24 hours. The first ping auto-binds the license to your portal domain.

Status	Behaviour
trial	7-day grace period. Domain check skipped. All features available.
active	Full access. License validated every 24 hours.
read_only	Expired or domain mismatch. View-only — no data changes allowed.
revoked	Access fully blocked. Contact support@maxen.world .

11 Role & User Management

[ROLES](#)

Role	Access
super_admin	Full control. Cannot be deleted. Always at least 1 active.
it_admin	Manage agents, cards, brands, machines, sessions, IP policies, field builder, bulk import.
floor_admin	Move agents on Floor Plan, mark terminations, initiate UUID rebinding on desk moves.
team_lead	Read-only view of own team's agent cards (no passwords shown).
it_agent	Own profile, Resource Vault (launch only — no password view).
hr	HR Portal only: submit new employee forms. Cannot access IT Portal.

Authentication methods (set per agent in Admin Panel → Agent Card):

Method	How it works	When to use
passkey	WebAuthn biometric (Face ID, fingerprint)	Default — most regions
pin_webauthn	WebAuthn PIN without biometric	Turkey (KVKK compliance)
totp	Google Authenticator / Authy 6-digit code	Alternative to passkey
otp_only	Email OTP at every login, no 2nd factor	Maximum compatibility

12 Troubleshooting

SUPPORT

OTP emails not arriving

Check RESEND_API_KEY and EMAIL_FROM. Verify sender domain in Resend. Check spam. Run: docker compose logs app | grep email

License read_only mode

Ensure LICENSE_SERVER_URL=https://vendor.maxen.world and server has outbound HTTPS. LICENSE_KEY must match exactly. Contact support@maxen.world if issue persists.

Machine stuck at REQ-XXXX

IT Admin must approve in Admin Panel → Machines. Verify Chrome Extension is loaded and setup.ps1 was run on that workstation.

Passkey not working

RP_ID must be the bare domain (no https://, no trailing slash). RP_ORIGIN must include https://. Agent must register from the same device.

Nginx 502 Bad Gateway

App may not be running. Check: docker compose ps && docker compose logs app. Nginx proxy_pass must point to port 3000.

Database connection error

Verify DATABASE_URL. Ensure postgres container is healthy: docker compose ps postgres. Check pg_hba.conf allows the itportal user.

Agent cannot see resource button

Check agent role is in allowed_roles[] for that resource. Check resource allowed_cidr — agent may be on a blocked network.

Need help?

support@maxen.world

Vendor Dashboard

vendor.maxen.world

Documentation

vendor.maxen.world/docs/