Deynao

Oracle supervision and diagnostics

Deynao — Autonomous supervision

Watch your databases continuously and be alerted automatically

Audience — Administrator · Operator (DBA)

Level — Intermediate — the Getting Started guide is a recommended prerequisite

Guide version — 1.1

Deynao — Autonomous supervision

In the *Getting Started* guide, you supervised a database **on demand**: you open the dashboard, Deynao connects and shows the state. **Autonomous supervision** goes further: Deynao watches your databases **continuously**, in the background, and **alerts you automatically** — even when no one has the tool open.

This guide shows how to enable and operate it, **safely**: a dedicated account, a non-intrusive collector, **transparent alert rules**, **audited** email alerts, a **daily report**, maintenance windows, and fine-grained access control.

> ☝🏻 **Prerequisites.** Having read the *Getting Started* guide, and having a **dedicated supervision account** (we get to it). The activation and configuration described here require the **Administrator** or **Operator** role.

Step 1 — The three usage modes

Before enabling anything, you must distinguish **three ways** of using Deynao — never to be confused:

Mode	Footprint	When to use it
One-off diagnostic	None (nothing is kept)	A quick look, leaving no trace
Database in the fleet, on demand	The connection is **kept** (encrypted); **no** background collection	You open the dashboard **whenever you want**
Autonomous supervision	Connection kept **+ collector active**	Deynao **watches continuously** and **alerts** — the subject of this guide

> 💡 Autonomous supervision is **opt-in**: by default, a database added to the fleet is in **"on-demand"** mode. You enable it explicitly, database by database. Once active, the database's card offers **"View collected state"** (the last measured state, **without** a new connection) in addition to the **"Live dashboard"**.

Step 2 — The dedicated supervision account

To watch **continuously**, Deynao needs an Oracle account. The **best practice** — and Deynao's firm recommendation — is to use a **dedicated, READ-ONLY account** (least privilege), rather than `SYS` or an

application account.

Deynao **provides the script** to create this account, ready to run, right from the welcome screen ("*View the GRANT script*") as well as in the connection form.

deynao_grant_privileges_template.sql — Copy — Download

```
-- ================================================================================
-- Deynao - Dedicated supervision account (creation + read-only privileges)
-- ================================================================================
-- This script CREATES the account (if missing) then grants it CREATE SESSION
-- + read-only SELECT on system views. No write privilege, no DBA role, no access
-- to application data. Generic (no account/server/IP hardcoded).
-- Compatible with Oracle 11g / 12c / 19c / 21c.
--
-- HOW TO RUN: connect as SYS, then run this file. The script prompts for the
-- supervision account name + a password (masked), creates the account if needed
-- and grants the privileges. Safe to re-run.
--   - Windows : Command Prompt on the Oracle server, then
```

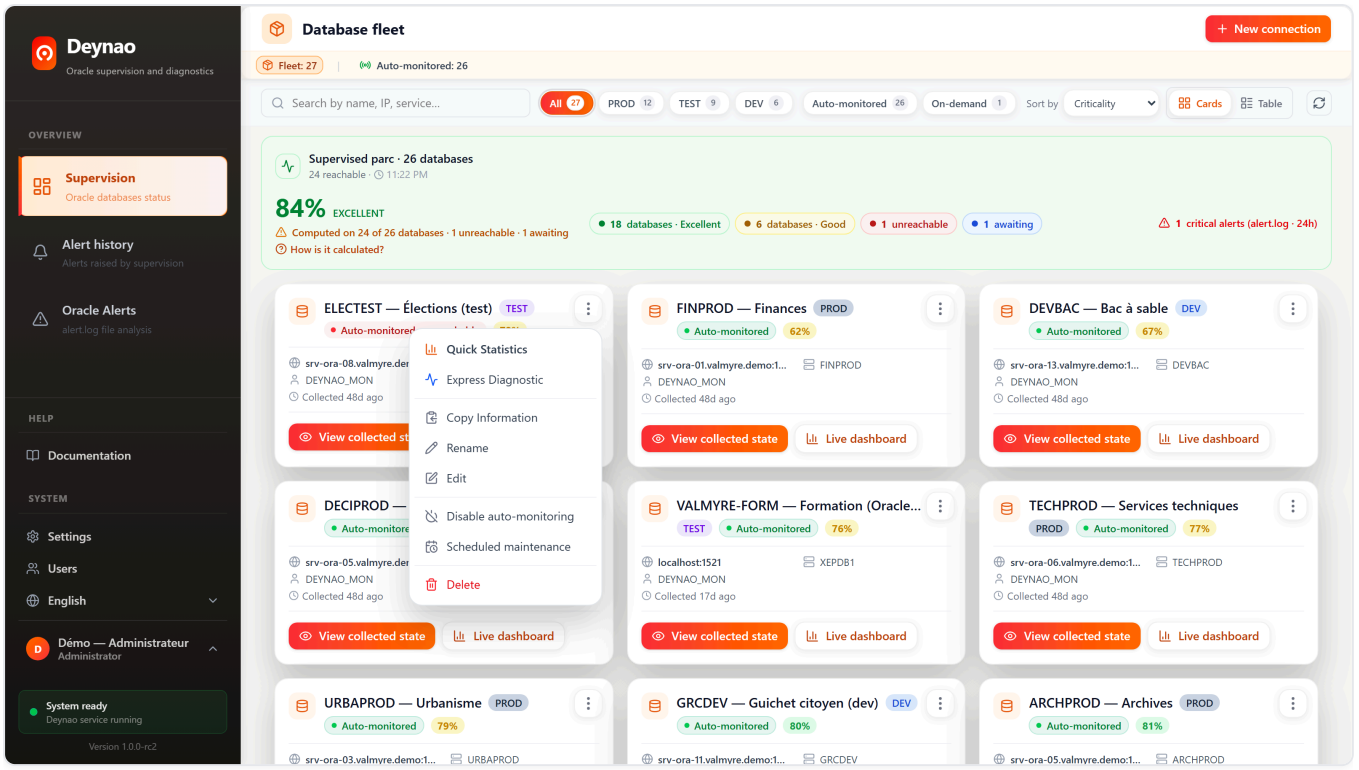
- The script **creates the account** (if it does not exist) and grants it the strict minimum: `CREATE SESSION` + `SELECT` **read-only** on system views.
- **No** write privilege, **no** DBA role, **no** access to application data.
- **Generic** (no name/IP hardcoded) and **compatible with Oracle 11g / 12c / 19c / 21c**.

> 🛡️ **Why a dedicated account?** It is **safer** (no risk of writes, minimal scope), **traceable** (Deynao's connections are identifiable), and **sufficient** for all supervision. An incident on this account never exposes your business data.

> 👆 **Step-by-step procedure** — get the script, run it, **verify** the privileges obtained and connect the account in Deynao: **The supervision account** guide.

Step 3 — Enable automatic supervision

Once the database is in the fleet, open its **actions menu** (⋮) and enable **automatic monitoring**.



On activation, Deynao **first tests the connection** — and this is where an essential safeguard comes in:

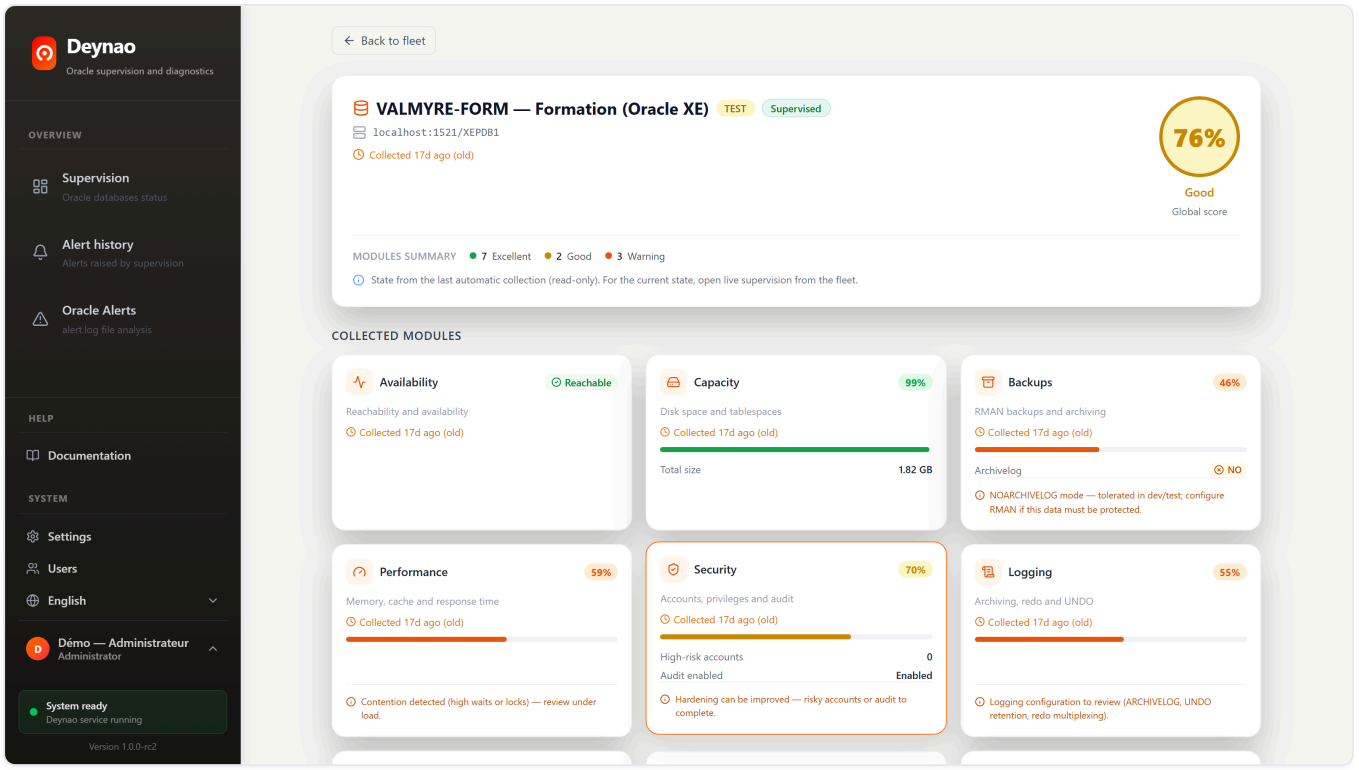
> ⚠️ **Protected activation.** If the password is wrong, Deynao **refuses** activation and **arms a circuit-breaker**: it does **not** retry in a loop. Result: **never** an Oracle account locked by repeated attempts. If the database is simply **unreachable** (network), activation is accepted and Deynao will retry later, without hammering the listener.

Once enabled, the database switches to **"Auto-monitored"** (the fleet counter reflects it), and the **collector** starts watching it in the background.

Step 4 — The collector: background supervision

The **collector** is the heart of autonomous supervision. It runs **in the background**, domain by domain (the **same 14 domains** as the live dashboard), at regular intervals — **without anyone having to open the tool**.

The result of each pass is viewable **without a new connection**, via **"View collected state"**: this is the state **already measured** by the collector, timestamped.



Its design is entirely guided by the principle "*never harm the database*":

- **Protected connections** — an **authentication circuit-breaker** (never a locked account) and a **network back-off** (never a hammered listener) frame every connection.
- **Cancel watchdog** — on Oracle 11g in particular, a query that drags on is **cancelled** cleanly: the collector never **hangs**.
- **Read-only and zero pollution** — it **modifies nothing** and **writes nothing** into the `alert.log` of supervised databases.

> 💡 **Guaranteed consistency.** The collector computes scores with **exactly** the same logic as the live dashboard. The **Health Score** you see live is the one the collector uses to decide whether to **alert** you — no divergence.

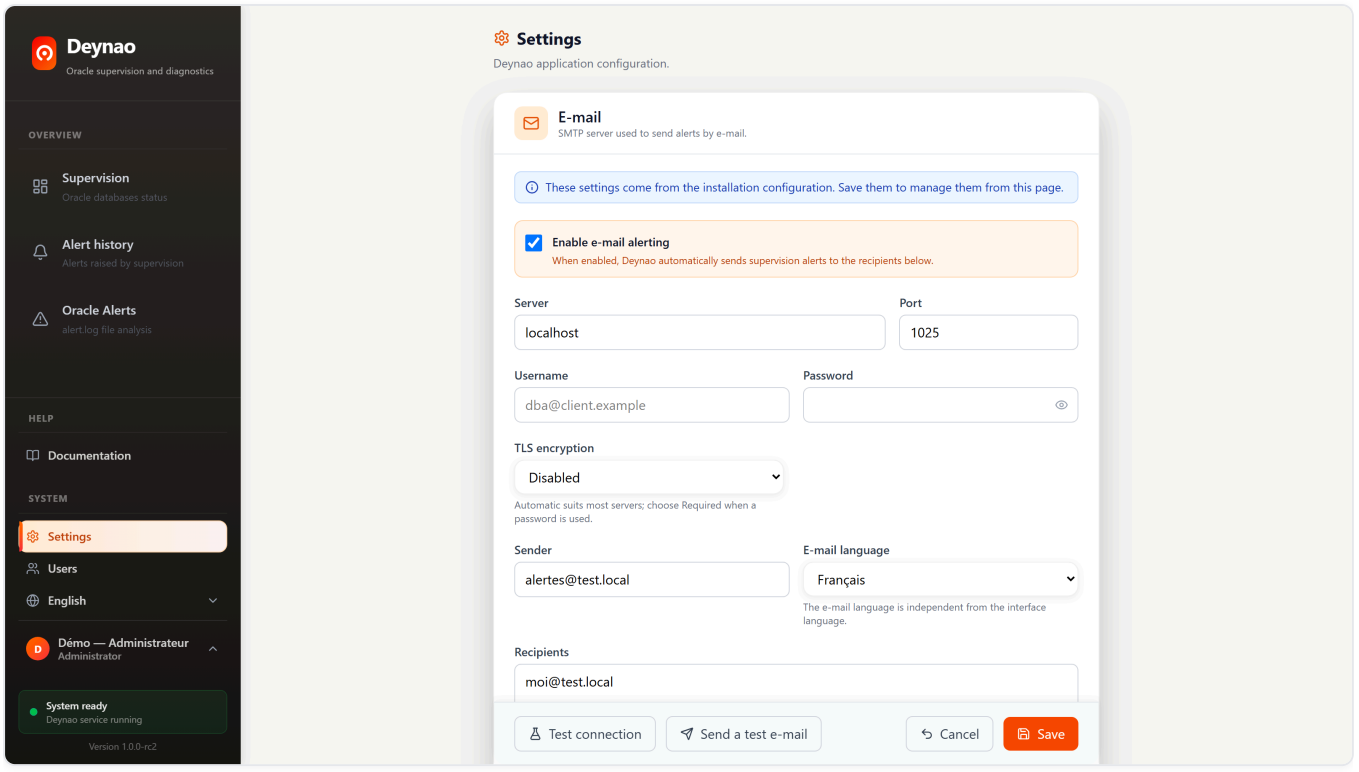
> ⏸️ **A clean pause on licensing.** If Deynao's **licence** is no longer operational (expired, missing), the collector **pauses** — no collection, alerts **frozen** — and **resumes on its own** as soon as it becomes valid again. No **artificial incident** piles up in the meantime.

Step 5 — Email alerts

This is the whole point of autonomous supervision: **being notified** without watching the screen.

5.1 Configure e-mail (SMTP)

Configuration is done once, in **Settings → E-mail**.



- **Enable e-mail alerting** — the master switch.
- **Server · Port · TLS encryption · Username · Password** — your (internal, on-premise) SMTP server's coordinates.
- **Sender** and **recipients** — who sends, who receives.
- **E-mail language** — **independent** of the interface language: an English-speaking team can receive alerts in English even if the admin uses Deynao in French.

> 🔒 **On-premise all the way.** The SMTP server is **yours**. Alerts travel through **your** infrastructure — no external gateway, no leak.

5.2 Verify — without waiting for a real alert

Two buttons avoid bad surprises: **"Test connection"** (tests the SMTP dialogue) and **"Send a test e-mail"** (a real end-to-end e-mail). You then receive a clear, branded message — "*If you receive this message, Deynao's e-mail alerting configuration is working. No action is required: this is a simple send test.*"

5.3 The alert e-mails

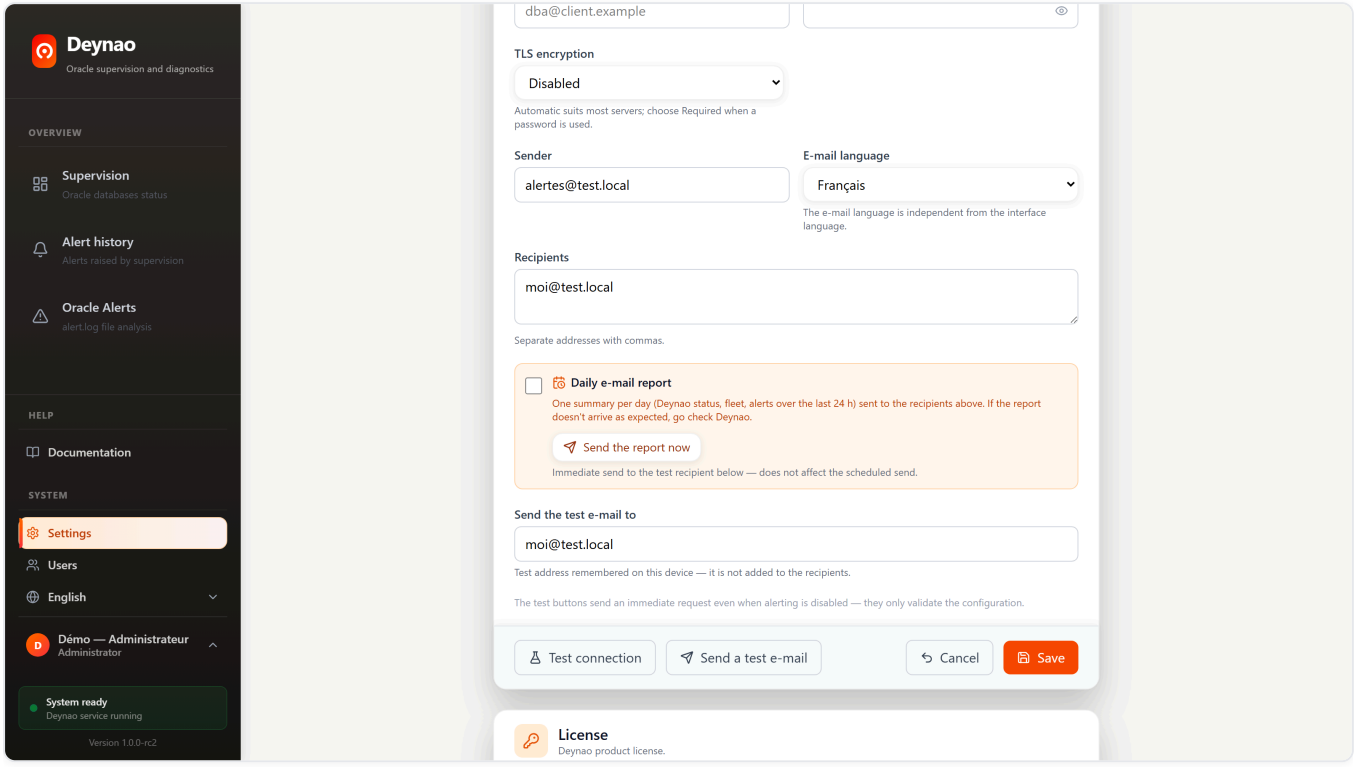
At the heart of alerting are the **alert e-mails** themselves — **educational**, written for an IT manager or a decision-maker as much as for a DBA: clear title, **problem**, **severity**, **since when**, then "*What it means*" and "*What to check*", and finally the technical detail. Four moments punctuate an alert's life:

E-mail	When
New alert	The problem is confirmed (raised)
Reminder	It **persists** — re-notified at most **once / 24 h**
Escalation	It **worsens** (e.g. Warning → Critical)
Resolved	It has disappeared — with the **real duration** of the incident

> 💬 **The right tone for the right reader.** The e-mail explains the *why* in plain language (never needless jargon); and the **"Resolved"** e-mail does **not** re-explain the problem (it no longer exists) — it confirms, with the duration. Every word is useful.

5.4 The daily report

Beyond alerts, Deynao can send a **daily report**: a **summary** at a fixed time (Deynao state, fleet, alerts over the last 24 h). A **"Send report now"** button also allows an immediate **manual send**.

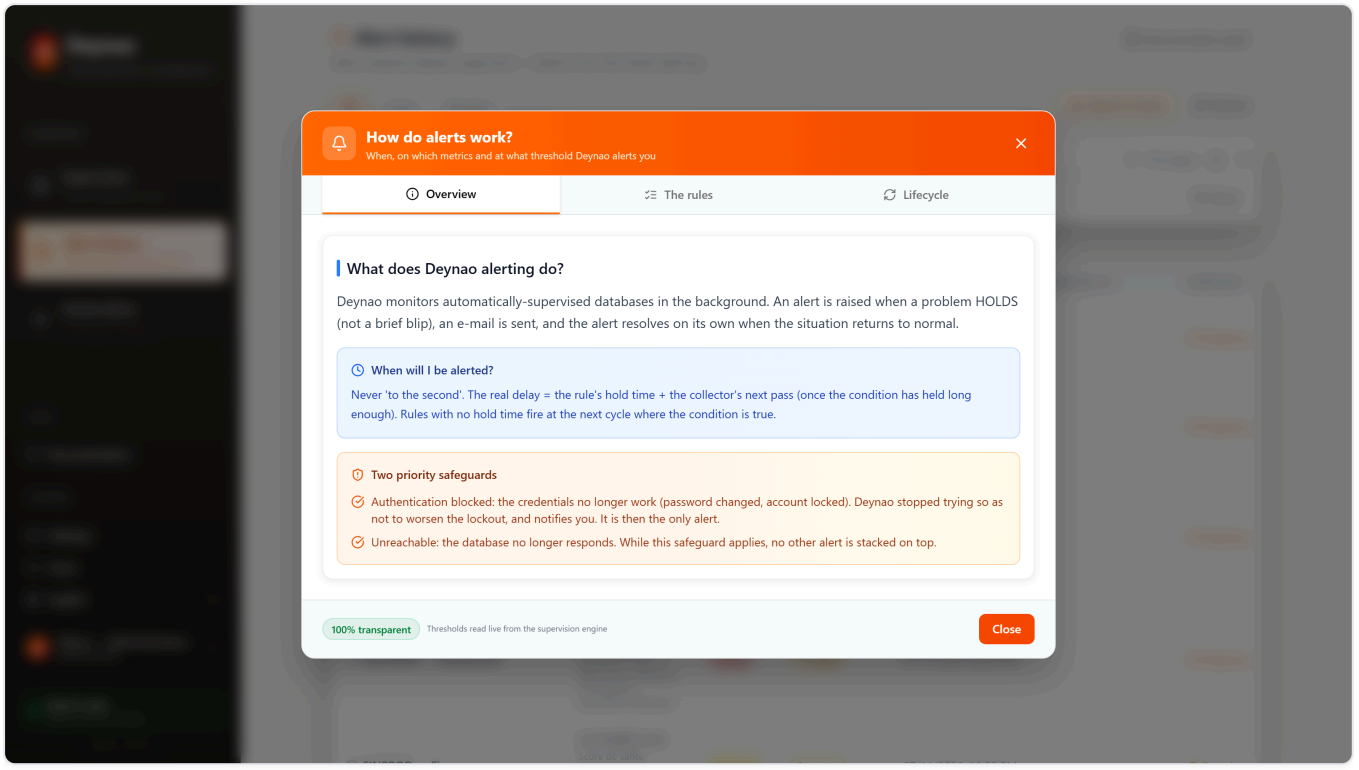


The report you receive is **readable and actionable** — a one-sentence summary ("*In one sentence: 7 points require your attention: Critical tablespace on …; Backup at risk on …; Unreachable on …*"), the **supervised fleet** (N databases · Excellent / Good / … counters), each database's health, then the **current problems** in detail (named), the **last 24 h** (raised / resolved), and the **Deynao state** itself (health, version, uptime).

> 🛰️ **The daily report is also a "sign of life".** It includes Deynao's **own state** and the time of the **last collection**. Its closing sentence says it plainly: *"This report confirms that Deynao was operational when it was sent. **A missing report should alert you.**"* In other words: if the report **does not arrive**, Deynao (or the server) is down — and you know it.

Step 6 — How Deynao decides to alert (the rules)

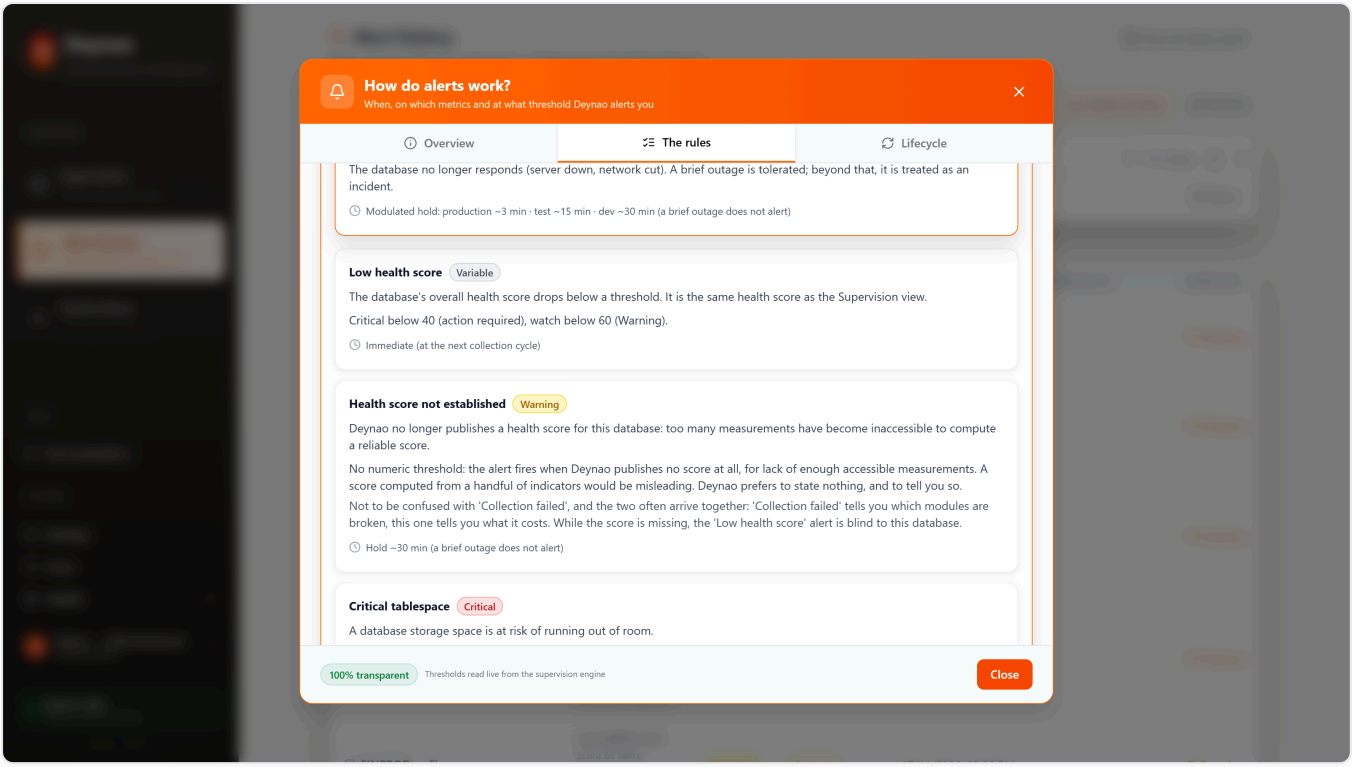
Good supervision alerts **neither too much nor too little**. Deynao makes its **rules fully transparent**: a **"How do alerts work?"** button (in the Alert history) opens the detail — and **all thresholds are read live from the engine**, no value hardcoded in a document.



Two common-sense principles:

- **An alert is raised when a problem *holds*** — not on every micro-blip. The real delay = the **rule's hold time** + the **collector's next pass**.
- **Two priority safeguards.** If **authentication is blocked** (password changed, account locked), Deynao **stops trying** (so as not to make it worse) and **that is the only alert**. If the database is **unreachable**, it does not **stack** any other alert on top.

6.1 The rules catalogue



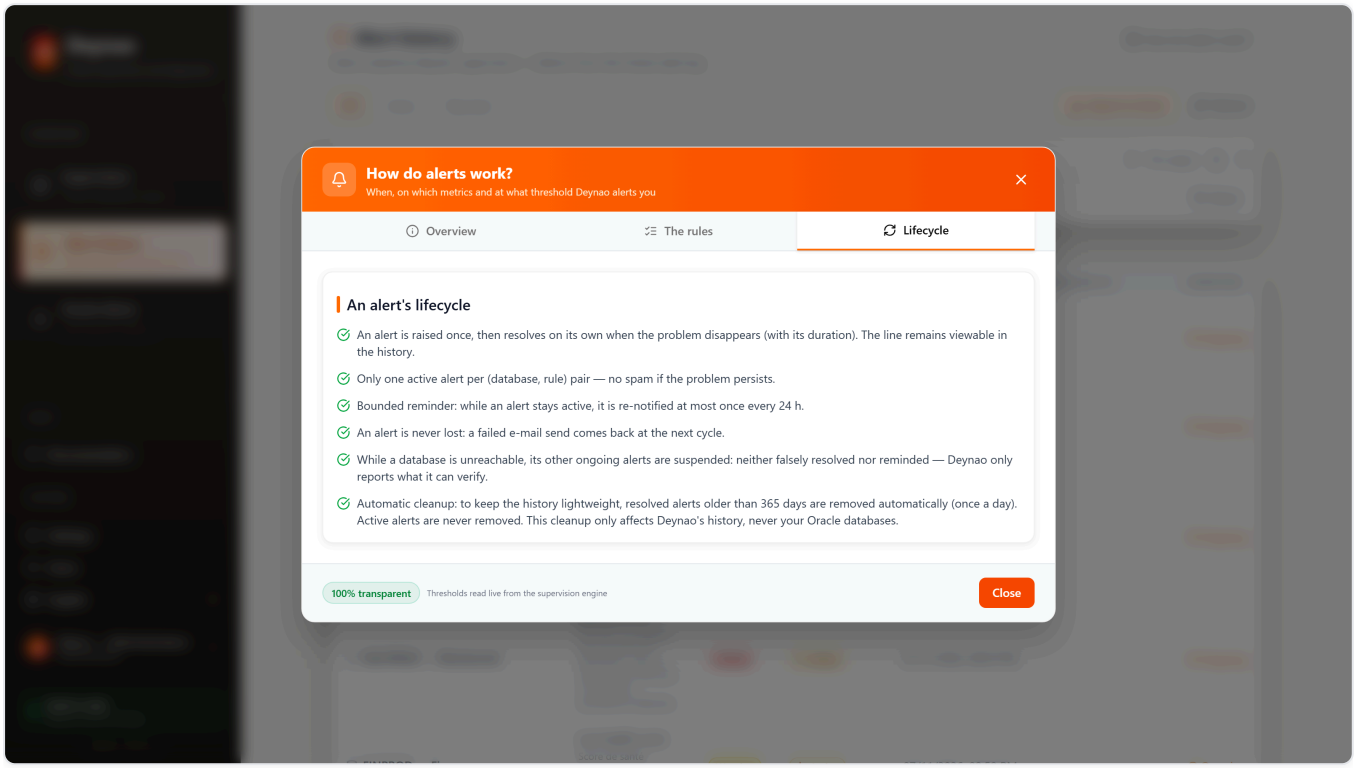
Rule	Severity	In short
Authentication blocked	Critical	Credentials that no longer work → Deynao stops trying and notifies
Unreachable	Critical	Database that no longer responds. **Modulated** hold time: prod ~3 min · test ~15 min · dev ~30 min
Low health score	Variable	Critical below **40**, watch below **60** (the same score as supervision)
Health score not established	Warning	Deynao no longer publishes a health score while the database responds: as long as it is missing, "Low health score" can no longer warn you
Critical tablespace	Critical	**No** % threshold: alerts **only** if the tablespace can no longer extend (autoextend maxed **AND** disk full)
Backup at risk	Variable	Last backup too old (threshold adapted to the rhythm: prod 2 d · test 8 d · dev 14 d) or ARCHIVELOG missing in prod
Recovery area full	Critical	FRA >90 % of **non-reclaimable** space (ORA-00257 risk) — production
Low security	Warning	Security score <30 or audit disabled — production
Scheduled job failure	Variable	**Your** Oracle jobs (payroll, accounting…) broken/failed — production
Collection failed	Warning	Part of the collection is **durably failing** while the database responds: partial data, not a dead database
Critical Oracle alerts	Warning	Critical codes found in the `alert.log`

🎯 **Thresholds that are *smart*, not mechanical.** A tablespace at 95 % but on autoextend **does not alert** (it can grow); a "full" FRA that is **reclaimable** neither. On the backup side, the same finesse: the age threshold **adapts to the real rhythm** (daily / weekly / monthly); a database in ARCHIVELOG whose **archives** are not backed up is flagged **even if the last "full" is recent** (RPO at risk); a production database that has **never** been backed up stands out immediately. Everywhere, Deynao alerts on the **real risk**, not on a raw percentage — fewer false positives, more trust.

🧭 **Two rules for the blind spot, and a criterion that matured.** "Collection failed" and "Health score not established" often arrive **together**, by design: the first **names the failing modules**, the second says **what it costs** (with no published score, the "Low health score" alert is blind). The "Collection failed" criterion is **temporal**: a module is declared durably down only if it is failing **and** has not collected successfully for at least **twice its cadence** (floor: **15 minutes**). Why not "three failures in a row"? Because with the collector's tight retries, a mere **transient hiccup** of a few minutes used to raise an alert that resolved right away: noise, the enemy of trust. The only exception: a module that has **never** collected successfully (missing privilege, absent view) is flagged from its very first failures.

Step 7 — An alert's lifecycle, and the History

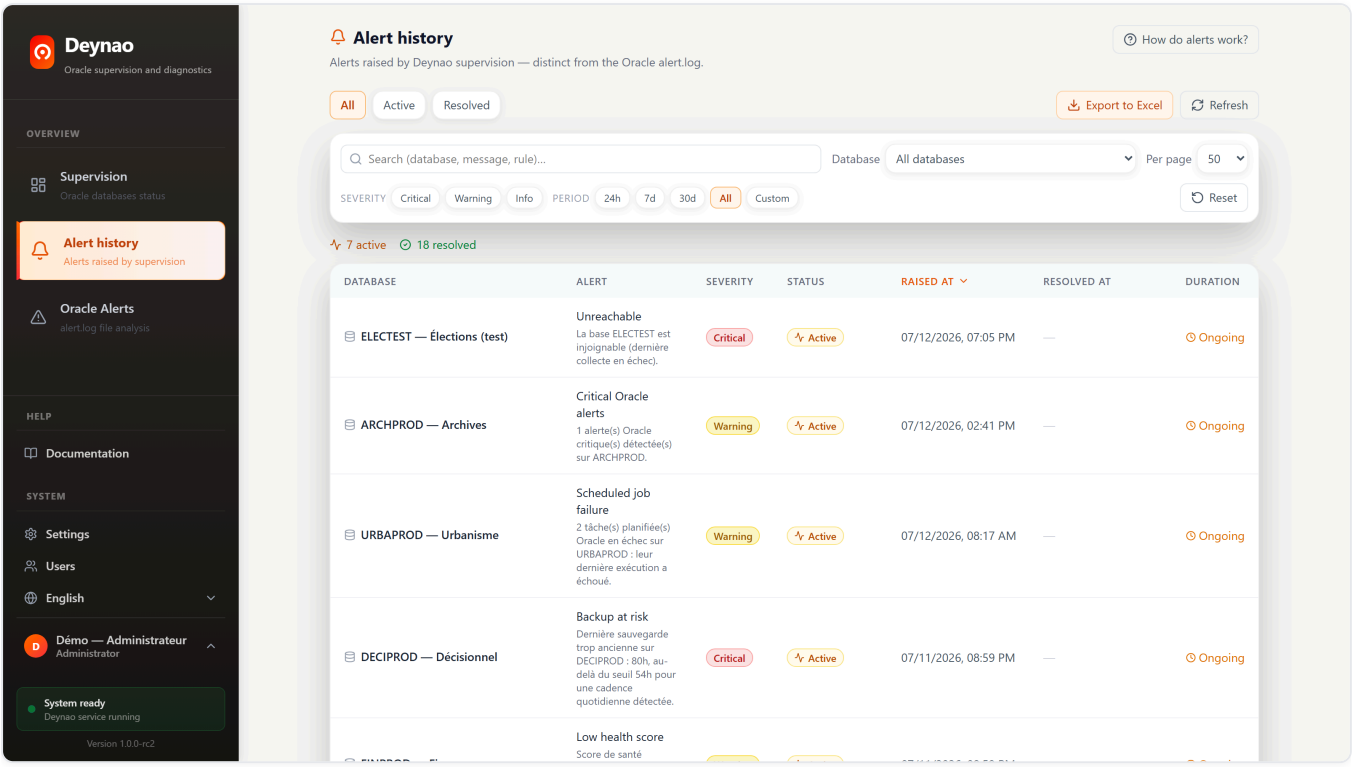
When the collector detects a problem that holds, it **raises an alert**, **sends the e-mail**, then **closes the alert** when the situation returns to normal. The **Lifecycle** tab of the same window details its guarantees:



- **A single active alert** per *(database, rule)* pair — **no spam** if the problem persists.
- **Bounded reminder** — an active alert is re-notified **at most once every 24 h**.
- **Never lost** — a failed e-mail **resurfaces** on the next cycle.
- **Cautious suspension** — while a database is unreachable, its other alerts are **suspended** (neither wrongly resolved nor reminded): Deynao only reports what it can **verify**.

🔁 **Two subtleties that make the difference. Anti-oscillation** — Deynao waits for **continuous confirmation** before declaring "Resolved": an indicator that **oscillates** around a threshold (e.g. 59 % ↔ 61 %) **never** sends a misleading "Resolved" / "New alert" pair. **Escalation** — if a problem **worsens** (Warning → Critical), an **escalation** alert flags it, on the **same** incident line and **only once**; an improvement, on the other hand, generates **no** noise.

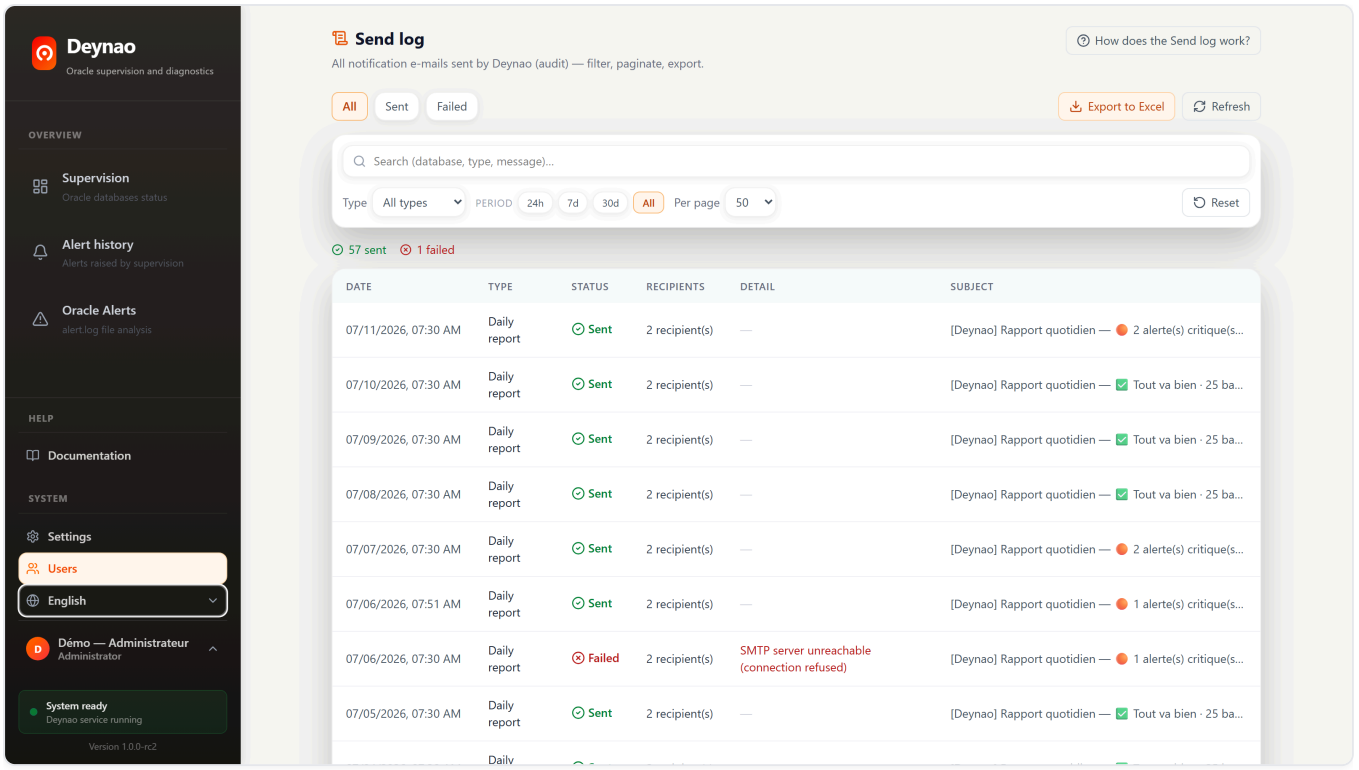
Everything is **recorded**. The **Alert history** lists every alert: database, severity, **status**, date **raised**, **resolved**, and **duration**.



✅ **An honesty worth highlighting.** If an administrator **disables** a database's supervision while an alert is open, Deynao does **not** mark it "Resolved" (which would suggest the problem is fixed). It closes it as **"Supervision stopped"** — a distinct status. *Disabling is not resolving*: the tool never lies to you about the real state.

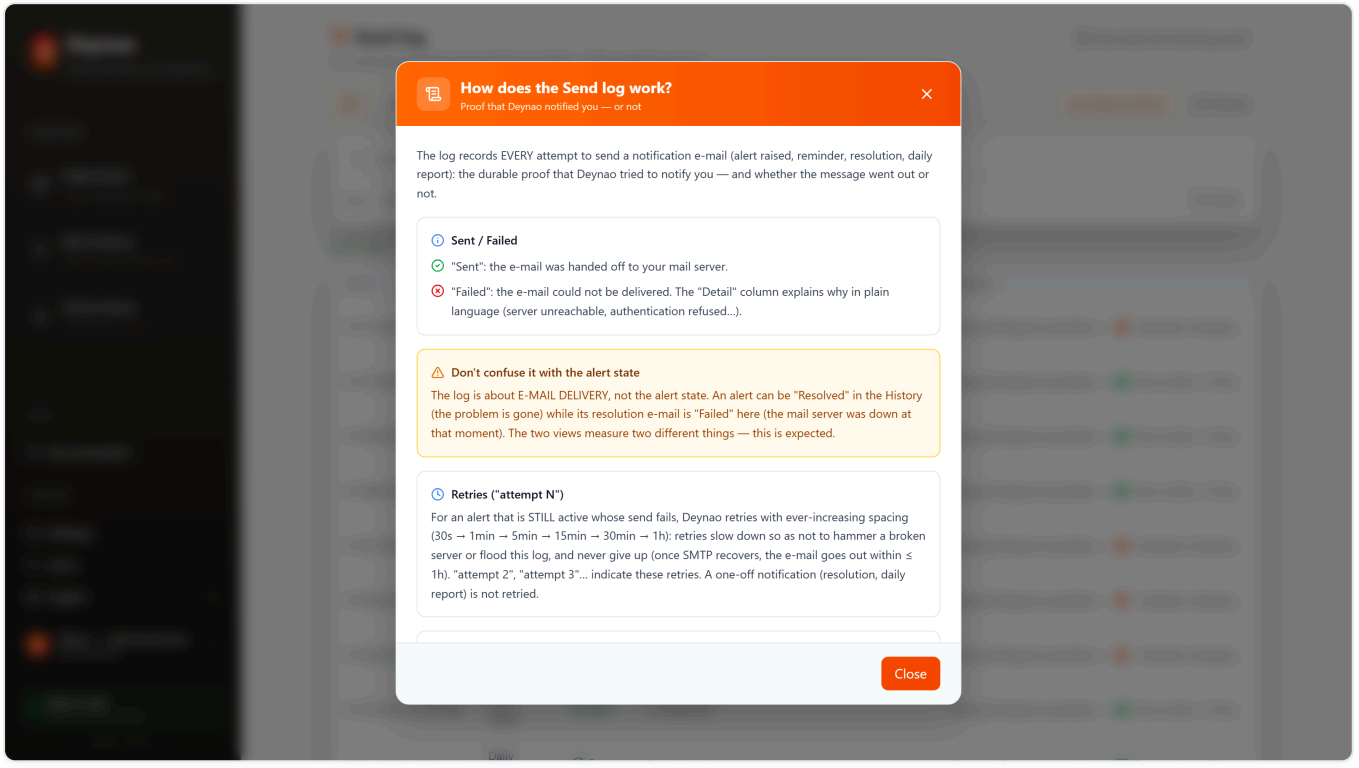
Step 8 — The send log: the audit of notifications

Every e-mail Deynao sends — or **tries** to send — is **traced**. The **Send log** (reserved for the administrator) is the **complete audit** of notifications.



- Filterable **All / Sent / Failed**, by period, and **exportable** (Excel/CSV).
- Each row: date, type, **status**, **number** of recipients, subject, and — on failure — a **plain-language error** (e.g. "*SMTP server unreachable (connection refused)*").

A **"How does the Send log work?"** button explains its logic:

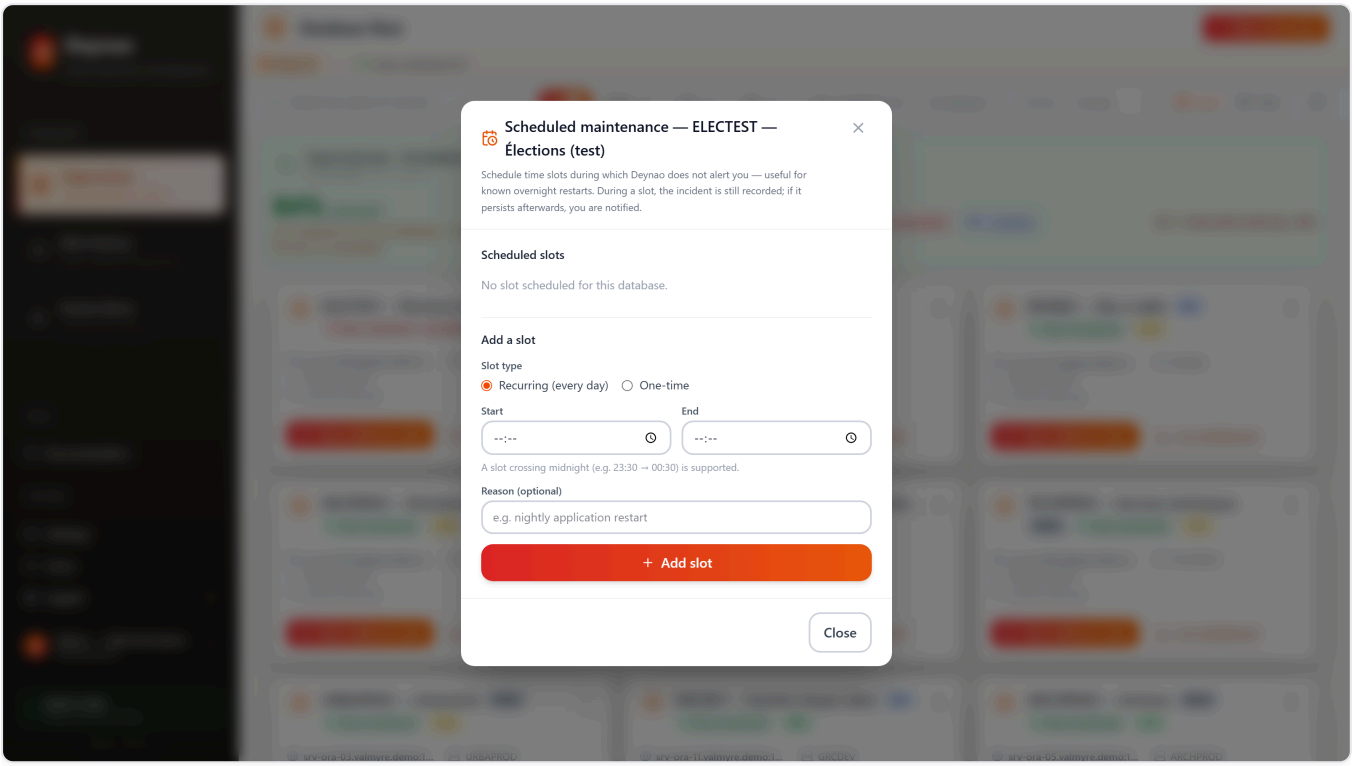


🔁 **The smart back-off.** If the SMTP server goes down, Deynao **does not flood** your inbox and **does not give up**: it **retries** with **increasing** delays — 30 s, 1 min, 5 min, 15 min, 30 min, then **once per hour** at most. As soon as SMTP is restored, the mail goes out.

📓 **A true, respectful audit register.** "*Delivery ≠ alert state*": a resolution e-mail that **could not go out** does **not** mean the alert is still open — the log distinguishes the two. Entries **purge themselves** (after 90 days), concern **only** Deynao (never your databases), and — a privacy detail — recipients' **addresses** are **never recorded**, only their **number**.

Step 9 — Maintenance windows

Your databases have **planned operations** (overnight restarts, batches) that would trigger **false alerts**. **Scheduled maintenance** (a database's ⋮ menu) makes Deynao **stay silent** during those windows.

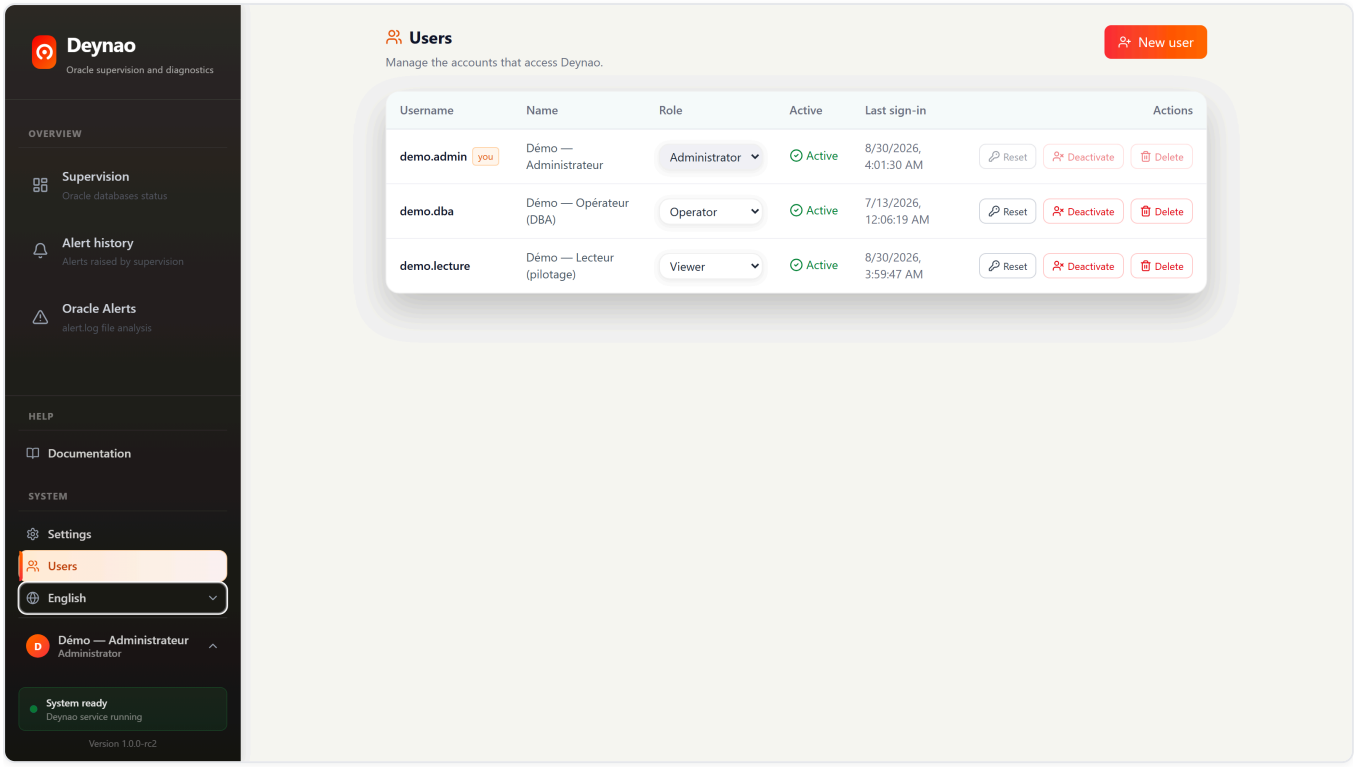


- **Recurring** (every day) or **One-time** — with a **start** and an **end**.
- A window that **crosses midnight** (e.g. 23:30 → 00:30) is correctly handled.
- An optional **reason** (e.g. "*nightly application restart*") documents the window.

🔕 **Silent, but never blind.** During the window, Deynao **does not alert** — but the incident **is still recorded**. And **if it persists after** the window, you are **notified**. A badge on the database's card indicates it is in maintenance, and until what time.

Step 10 — Users and roles (RBAC)

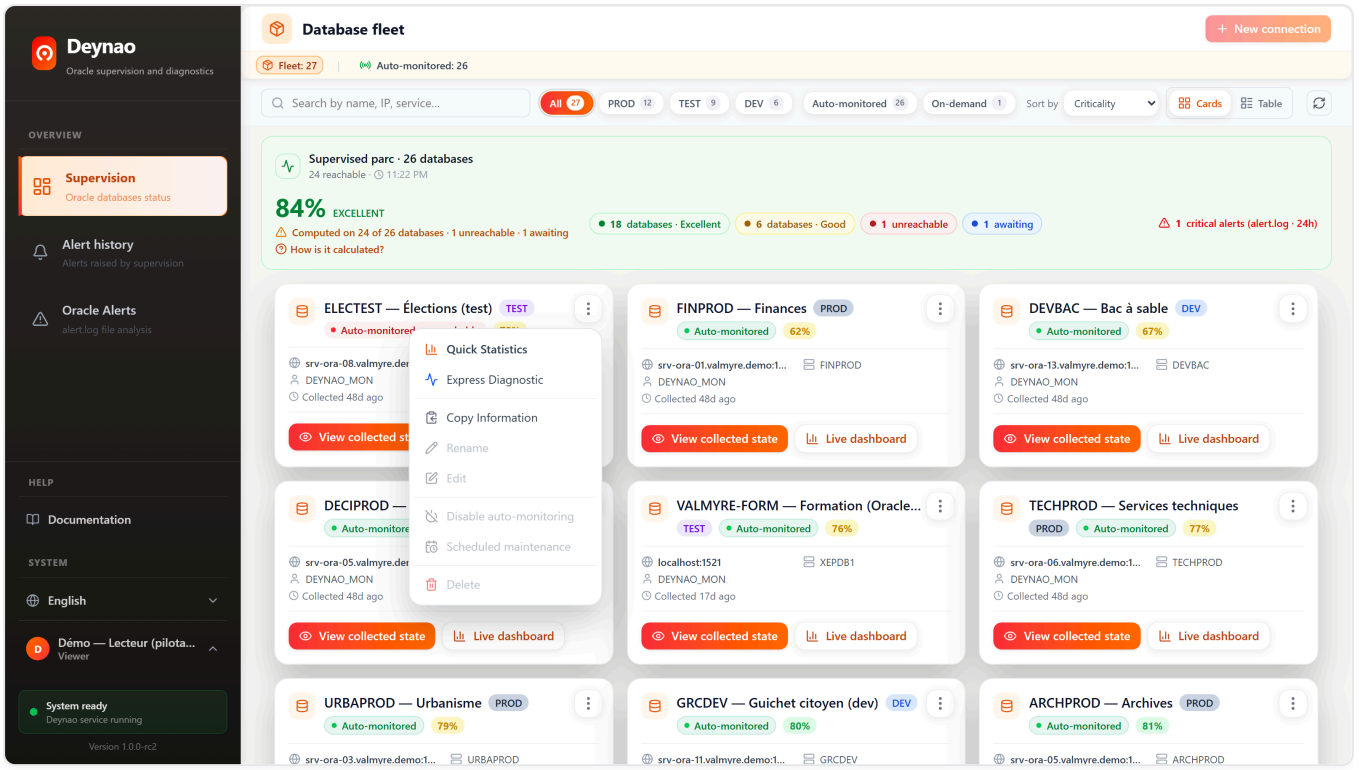
Autonomous supervision acts **on your behalf**: it is therefore essential to know **who can do what**. Deynao distinguishes **three roles**, managed by the administrator in **Users**.



Role	Can do	Cannot
Administrator	**Everything**: users, settings (SMTP, licence), connections, supervision	—
Operator (DBA)	Supervise, connect databases, **enable/disable** monitoring, act	**Manage users**
Viewer	**View** everything (fleet, dashboards, history, reports)	**Change anything**: neither enable monitoring, nor manage accounts

The administrator **creates** accounts ("*New user*"), **resets** a password, **deactivates** or **deletes** an account, and sees everyone's **last sign-in**.

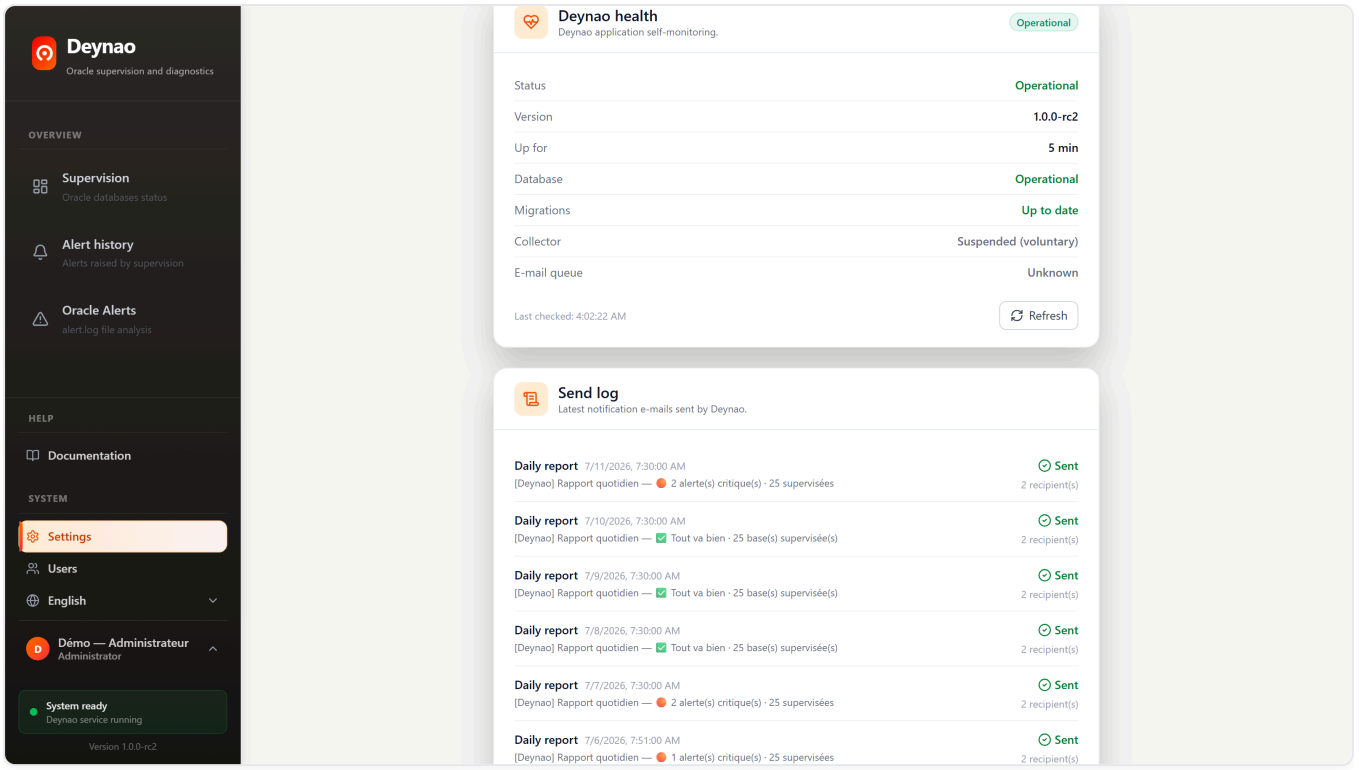
A concrete example — the Viewer. A *Viewer* account sees everything but touches nothing. In a database's menu, its **modifying** actions (Rename, Edit, **Disable auto-monitoring**, Scheduled maintenance, Delete) are **greyed out**: only the **read** actions remain (Quick Statistics, Express Diagnostics, Copy). And the **Settings** and **Users** menus are **inaccessible** to it.



> **The right role for the right person.** A decision-maker or a manager gets a **Viewer** access: they consult the fleet's state and the reports, **with no risk** of changing a configuration or interrupting a supervision.

Step 11 — The safety of autonomous supervision

Supervising **continuously** must **never** weaken your databases — nor the tool itself. Deynao goes as far as **monitoring itself**.



The **Deynao Health** card (in Settings) gives the application's **self-diagnosis**: overall state, **collector**, internal database, **migrations**, **e-mail queue**. A **safeguard** to know, at a glance, that supervision is **alive and well** — complemented by the "sign of life" from the **daily report** (Step 5.4).

And the underlying guarantees, recalled:

Guarantee	What it protects
Anti-lockout	Never a locked Oracle account (authentication circuit-breaker)
Network back-off	Never a hammered listener (increasing delays, up to once/h)
Read-only	Never a modification of your databases
Zero pollution	Never a line written into your `alert.log`
Never give up	A failed e-mail is retried, never lost; an alert stays open as long as the problem persists

> 🛡️ **The cardinal principle, applied continuously.** A supervision running 24/7 is all the more bound never to put the supervised database at risk. That is the promise Deynao keeps on **every** collection, **every** connection, **every** alert.

You are ready

Your fleet is now supervised **continuously and safely**: a **dedicated** read-only account, a non-intrusive **collector**, **transparent alert rules**, **audited** and retried **email alerts**, a **daily report** that also serves as a sign of life, **maintenance windows** for planned operations, and clear **roles** so that each person acts only within their scope.

> **What's next?** All that remains is to **deploy** Deynao durably on your infrastructure (workstation or server, as a Windows service or a container). That is the subject of the next guide: "*Installing Deynao*".