ExTuner AI

AI-driven SQL tuning automation solution

PRODUCT BROCHURE

AI SQL TUNING

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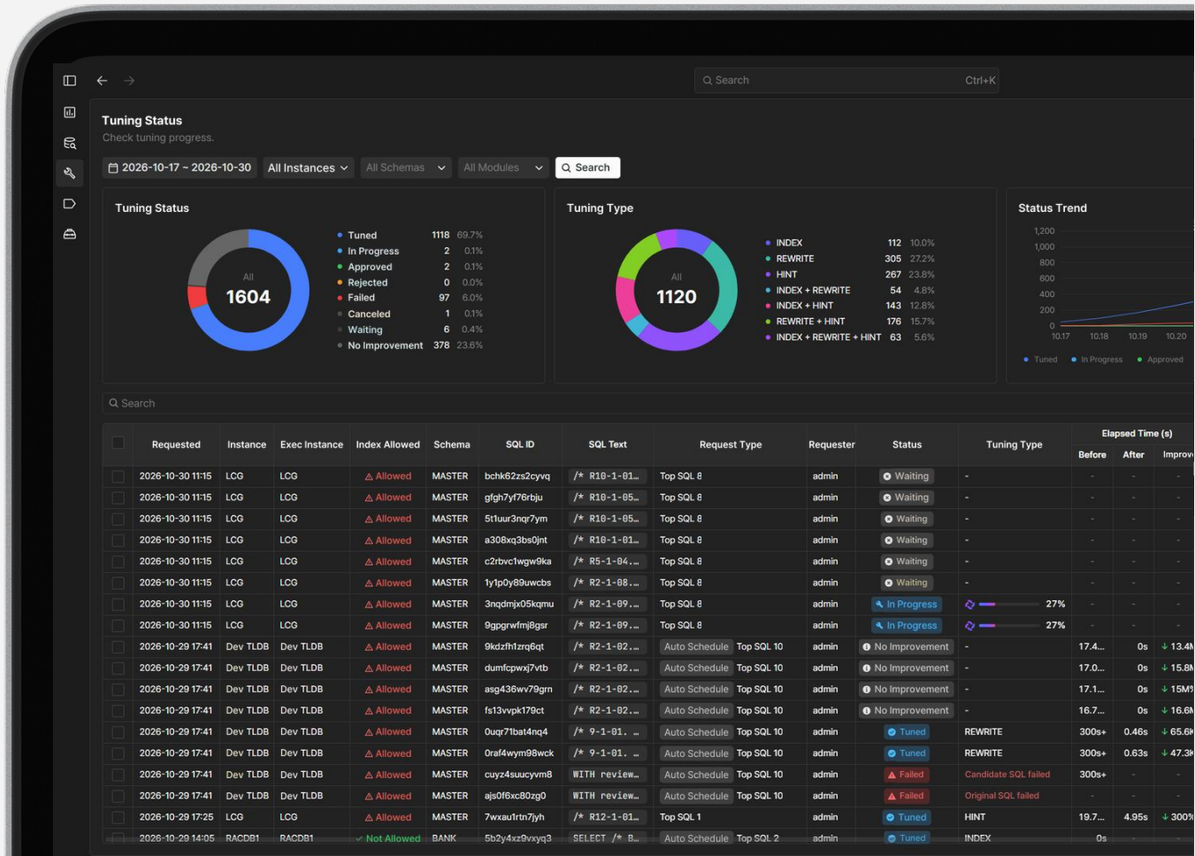
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Why ExTuner AI stands out

Tuning-specialized AI built on expert methods and review criteria

SQL that needs tuning keeps piling up in production, yet tuning still rests on one or two skilled DBAs. Incidents and daily work push it back, and recurring heavy SQL is handled differently by each person, with no standard procedure. That is why tuning many SQL statements on time, at consistent quality, is so hard.

ExTuner AI carries the tuning methods and review criteria EXEM has built through years of DB performance consulting. Every proposal is checked for the same meaning and results as the original SQL, then measured before and after on a real DB. A person approves before anything reaches production. Expert-designed validation, not just proposals, is what makes ExTuner AI stand out.



Global Standard

Proven at scale

EXEM covers the full stack, from databases to cloud, AI and big data, and grows with 1,100+ customers across 29 countries.

Countries served
29+

Cumulative customers
1,100+



Product Highlights

Key capabilities

Heavy SQL and tuning priorities

Analyzes V$SQL and AWR load trends to find SQL that keeps causing load and shows what to review first.

Before/after views with AI rationale

Puts SQL, plans, measured latency and I/O side by side, with the AI's rationale and bind checks.

Tuning history recorded per SQL

Requests, approvals, rejections and tuning counts are logged per SQL, so every change can be traced.

Index impact measured first

Candidate indexes are created as Invisible to measure SQL whose plans change. Validation indexes are removed automatically.

Dozens of SQL tuned in batches

Scheduled or recurring batches are analyzed, tuned and reviewed in queue order. Your team approves.

On-premises AI, no data leaves

SQL and performance data never leave your network. AI analysis and tuning run inside your environment.

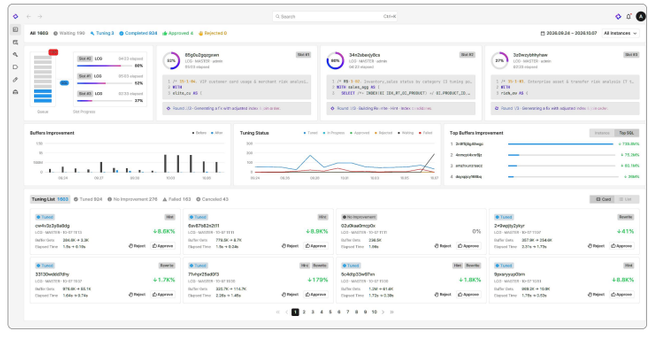
AI tuning dashboard

See AI tuning progress, results and trends on one screen. SQL in progress and results awaiting review appear together, so you know what to approve.

1 AI tuning job status

Track the SQL AI is working on and each job's progress in real time

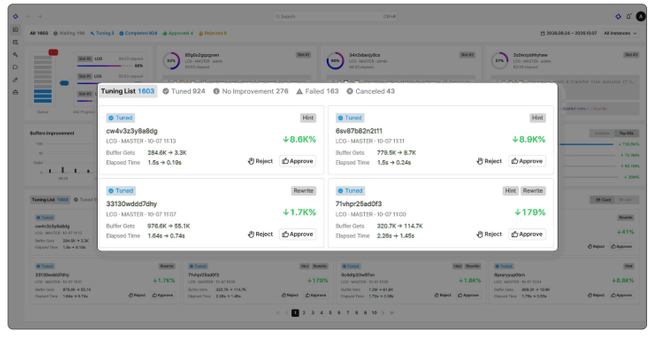
- Counts by status, from waiting to rejected
- SQL and progress for each running job
- Current stage and task for each SQL



2 Tuning result list

Review results as cards or a list and compare performance before approving

- Counts by result: tuned, no improvement, failed
- Before/after Buffer Gets and Elapsed Time for SQL with measured results
- Approve or reject right from the results



3 Tuning performance over time

Aggregate results and status by period to follow performance trends

- Daily before/after Buffers and count trends by tuning status
- SQL and instances ranked by Buffers improvement



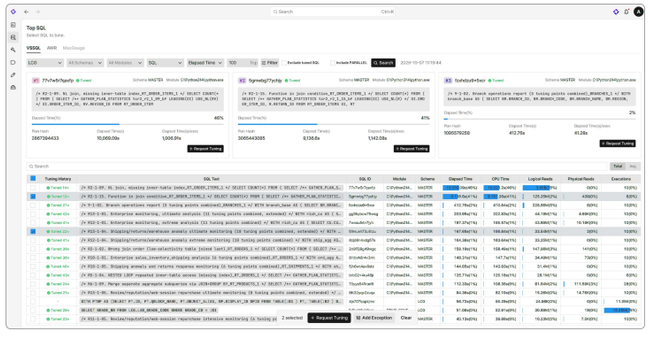
Target analysis

Analyzes V$SQL and AWR data to surface heavy SQL and tuning priorities. Check trends, bind variables and plans in one panel, then request tuning now or on a schedule.

1 Production performance analysis

Understand each SQL's load profile and resource use from current and past data

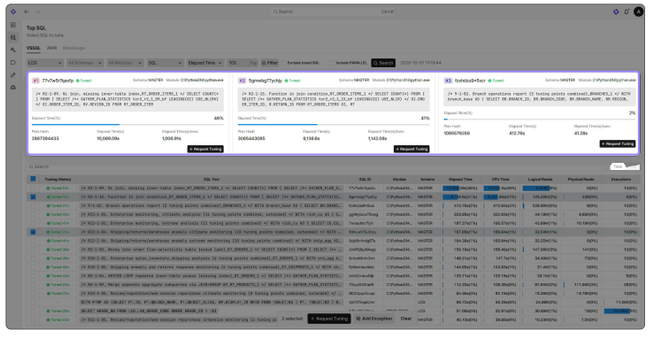
- Current load from V$SQL, load for a chosen period from AWR
- Load per SQL by key metrics such as Buffer Gets and Elapsed Time



2 Tuning priorities

Ranks the most impactful SQL based on load metrics and trends

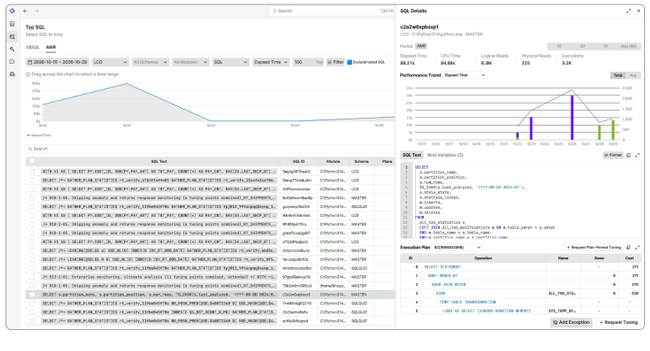
- Find Top SQL whose load builds up over runs
- Exclude already-tuned SQL to avoid rework
- Select several SQL and request tuning at once



3 SQL detail analysis

Check a selected SQL's performance and execution in the detail panel, then decide

- Performance trends by period and metric
- SQL text, bind variables and execution plan
- Request tuning now or later, or add an exception



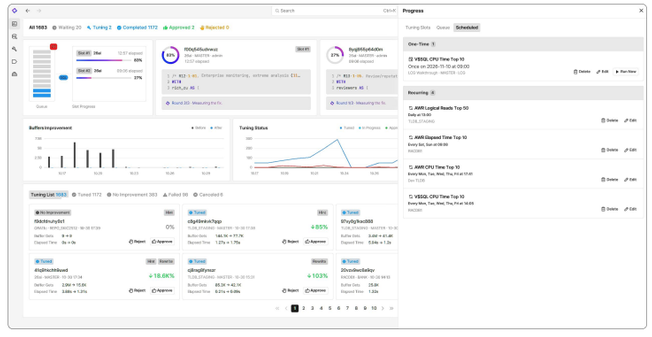
AI auto-tuning

Queue dozens of SQL in a batch and AI analyzes and tunes them automatically. Each stage must pass set review criteria before moving on. During busy hours, your team can pause jobs or shift when they run.

1 Batch run management

Group SQL by condition, schedule runs and manage the queue order yourself

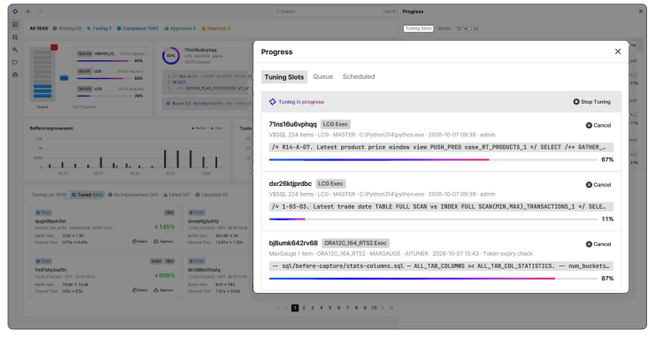
- Build targets from the top N by metric (CPU Time, Elapsed Time in V$SQL·AWR)
- Run once, or daily or weekly on a schedule
- Move urgent SQL up with priority tuning and cancel jobs you no longer need



2 Per-SQL run tracking

Follow tuning in real time and control runs when needed

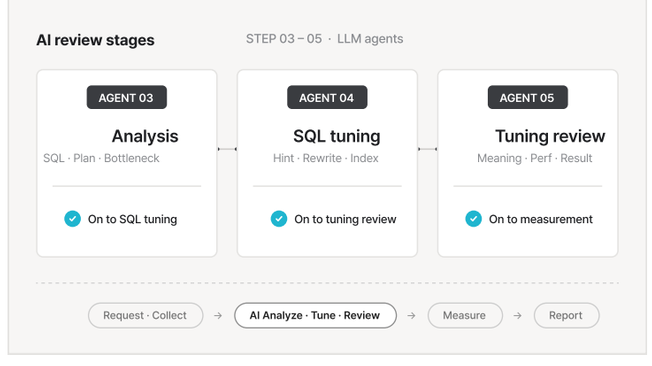
- Parallel tuning with per-SQL progress
- See waiting, in progress, tuned and failed status for requested SQL in one list
- Cancel single jobs or stop all tuning
- Check why a job failed, then re-tune



3 AI review stages

Only passing proposals get measured

- AI agents run analysis, SQL tuning and tuning review stage by stage
- Meaning, performance and result checks based on criteria from DB consultants



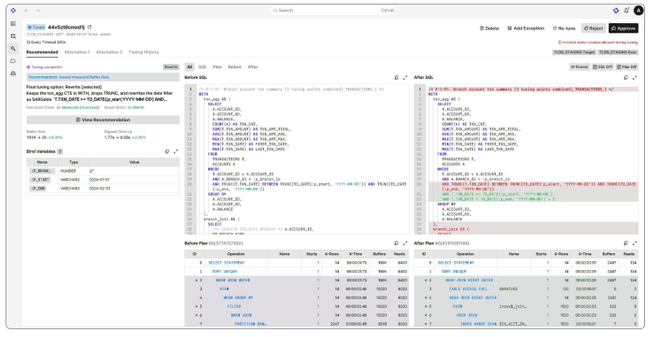
Compare and review

Compare SQL and execution plans before and after tuning, with the rationale and the bind values used. Before a candidate index goes to production, its impact on related SQL is measured to catch regressions in advance.

1 Before/after comparison

Put SQL and plans side by side to see exactly what changed

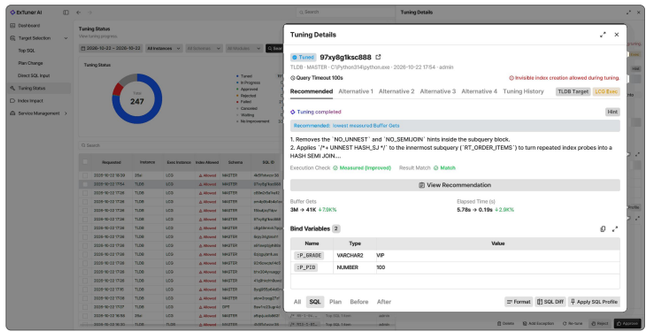
- SQL Diff shows edited SQL, Plan Hash shows if the plan changed
- Measured Buffer Gets and Elapsed Time
- Plan changes in access paths and joins



2 AI rationale

Explains why AI proposed each change to support the reviewer's decision

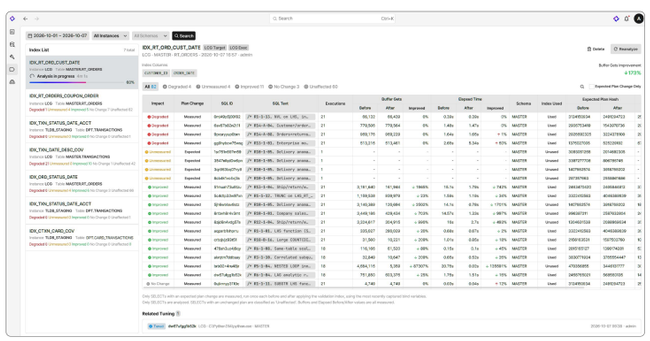
- Why each Rewrite or index change
- Tunes with captured bind values; change them and re-tune if needed
- Measured reasons for the top pick



3 Index impact validation

Check plan changes in SQL on the same table and measure the impact where plans change

- Temporary Invisible candidate indexes
- Improved, degraded or unaffected per SQL
- No DML during validation, and validation indexes are removed automatically



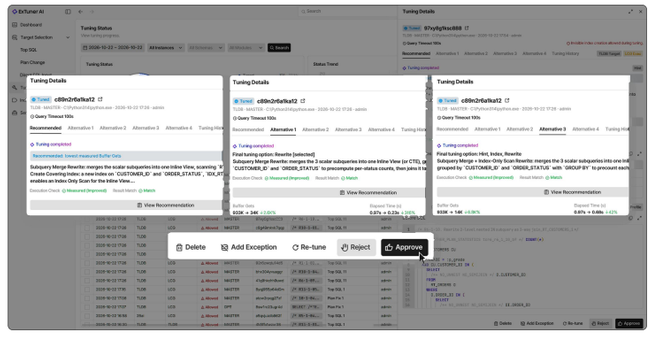
Approval & history

Your team compares the AI's recommendation and alternatives, then approves, rejects or re-tunes. Recommendations download as documents for sharing, and every run stays in the SQL's history for change management and audits.

1 Act on review results

Compare recommendation and alternatives with validation results, then decide

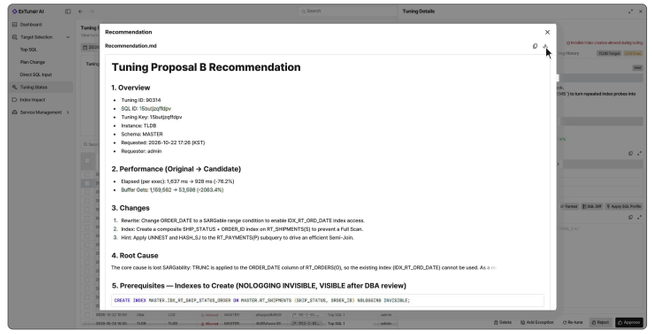
- Approve or reject after reviewing the options
- Request re-tuning when more work is needed
- Exclude SQL that needs no tuning



2 Recommendation download

SQL before and after, performance results and change rationale in one document

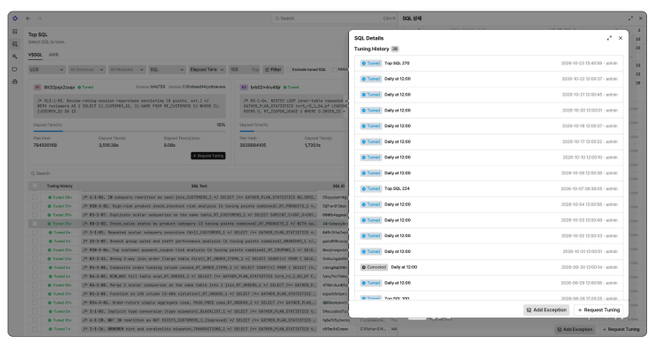
- Changed SQL and required index DDL, listed in the order to apply
- Copy the content or download it as a Markdown (.md) file
- Attach to team reviews or change records



3 Tuning history per SQL

Every run is added to the SQL's record so you can follow its changes over time

- Each entry keeps the SQL, plan and metrics
- Requester, request time and status included
- Scheduled and manual runs in one list



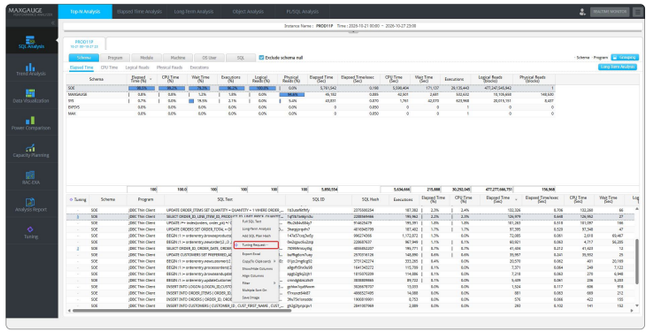
MaxGauge integration

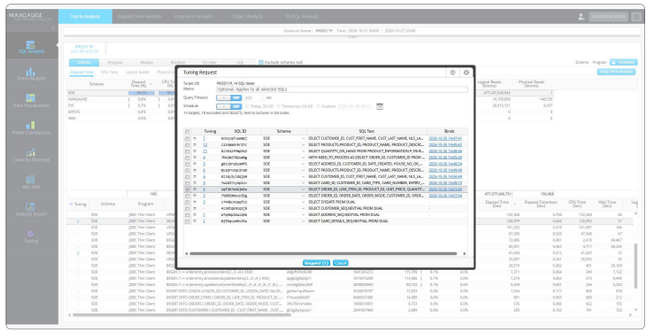
Send heavy SQL found in MaxGauge straight to ExTuner tuning without switching screens. Review and approve results inside MaxGauge as well. Nothing is applied to production automatically; changes follow your change-management process after approval.

1 Request tuning with a right-click

Pick heavy SQL on real-time monitoring or post-analysis screens and request tuning

- Request several SQL at once or schedule them for a set time
- Only SELECT statements are included as targets
- Admins grant request rights per instance

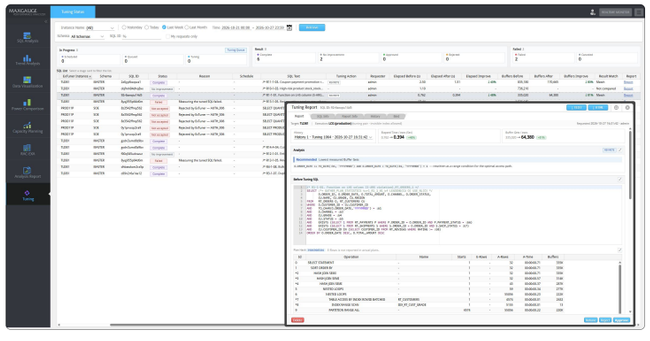




2 From results to approval

See progress, results and improvement at a glance on the Tuning Status screen

- Tuning counts appear in the SQL list; click to open the report
- Report shows cause, changes and metrics
- Approve, reject or re-tune inside MaxGauge



Architecture

Structure

1 Target and execution DBs

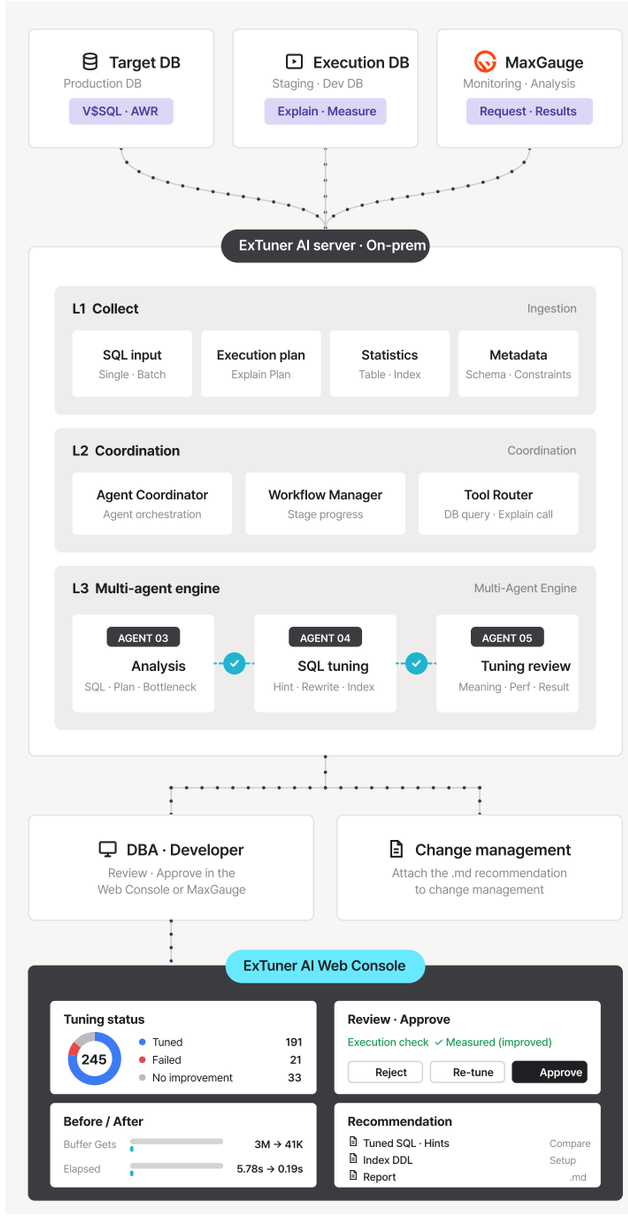
- Collects SQL, execution plans, V$SQL and AWR data, statistics and metadata from the target DB
- Measurement can run on a chosen execution instance, such as staging or dev, instead of production

2 ExTuner AI server

- On-premises AI runs every step from collection to review inside your network; no data leaves it
- A coordination layer manages agent order, stage progress, DB queries and Explain calls
- Analysis, SQL tuning and review agents run in order; each stage must pass review criteria first
- Results are validated with Explain plans and measured performance

3 Access and outputs

- DBAs and developers review and approve results in the Web Console or in MaxGauge
- Download .md recommendations and attach them to change records



Platform Specs

Supported environments

Target DB

Supported DBs

Oracle Database 11gR2 or later (Single / RAC)
Connects to production, staging, test and dev DBs
※ Cloud environments (RDS / OCI, etc.) on request

Performance data

V$SQL · AWR
※ AWR requires an Oracle Diagnostics Pack license
※ Runs on V$SQL alone where AWR is unavailable

Access · Privileges

Connection : JDBC (dedicated account extuner)
Target DB (prod) : read-only, no object/index DDL
Execution DB : read + create/drop validation indexes
※ One account if target and execution DB match

ExTuner server

Server specs (single server)

OS : Rocky Linux 9 (x86 64bit) ※ Windows not supported
CPU : 24 Core (recommended) / 16 Core (min)
RAM : 64GB (recommended) / 32GB (min)
GPU : 1 × NVIDIA H200 141GB class
DISK : SSD 2TB or more (recommended) / 1TB (min)
Repository : PostgreSQL 17 or later
※ All components run as Docker containers,
with offline install for air-gapped networks
※ Keep /data separate from the OS volume

Network

Server IP : 1
Inbound : 3000 (Web, required)
/ 3001 · 8080 (admin) / 22 (SSH)
Outbound : target DB listener port
(incl. SCAN / VIP for RAC)
※ 3001 · 8080 · 22 can be limited to specific PCs

MaxGauge integration

MaxGauge v5.3 or later
Traffic : MaxGauge server → ExTuner server over HTTP(S)

Browser (PC)

Latest stable Chrome · Edge
Resolution : 1920×1080 (FHD) recommended

Data Everywhere, Make It Matter

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