ORACLE AI WORLD 2026 • PARTNER HACKATHON

Oracle Leave Intelligence Agent

A BeneSphere™ use case for enterprise leave visibility and Section 45S readiness

Business goal: retrieve all 2025 leave activity and monitor 2026 leave activity monthly, then identify potentially qualifying leave periods and payment components for specialist review.

Design principle: AI discovers, explains and routes. Versioned deterministic rules classify eligibility and calculate supported amounts. People approve tax-sensitive decisions.

Executive definition

BeneSphere™ Leave Intelligence does not administer or approve leave and does not replace Oracle Absence Management, carriers or leave administrators. It builds a central, traceable view of leave episodes, their payment and policy context, and their possible Section 45S treatment.

1. Target outcomes

Workstream	Business question	Required output
2025 historical baseline	What leaves occurred in or overlapped 2025?	Annual/monthly counts by type, unique employees, duration, reconciled employer-paid amounts; 2025 rule-set screening
2026 monthly intelligence	What changed each month in 2026?	Monthly new/active/completed episodes; leave mix; paid/unpaid amounts; open issues; year-to-date trends
Employee drill-down	What happened to this worker?	Chronology of episodes, dates, types, day/pay segments, sources and supporting records
Section 45S screening	Which portions warrant credit review?	Employer/employee/leave/payment gates; eligible, excluded, uncertain segments; reason codes
Human review	What must a specialist confirm?	Queue of disputed mappings, missing pay or policy evidence, exclusions and approval decisions

Important tax-year boundary

For a calendar-year taxpayer, classify 2025 using the pre-2026 Section 45S requirements; classify 2026 under the amended framework effective for tax years beginning after December 31, 2025. A fiscal-year employer must use its actual tax-year boundaries. 2026 adds a premium-based method, an optional six-month service election and a minimum customary 20-hour workweek condition. Do not back-apply these changes to 2025.

2. Data extraction and normalization

Oracle Fusion HCM Absences REST supports retrieval of recorded absences, including employee/person identifiers, absence entry IDs, start dates, durations, statuses and absence-related details. Confirm actual role permissions, tenant configuration and field availability during setup. Payroll paid amounts are not reliably established by the existence of an absence alone.

Source/domain	Minimum fields or evidence	Why it matters
Oracle Absences	Absence ID, person ID, type/reason, start/end, duration, status, last update, legal entity	Base inventory; event lineage; historical and incremental extraction
Worker and assignment	Person/assignment, legal employer, hire/service dates, work schedule, state, hours, compensation facts	Employee and tax-year eligibility tests
Payroll and payments	Earning elements, pay dates, amount, hours, base pay, employer-funded portion, reversals	Paid vs unpaid separation, wage calculation and reconciliation

Policies and plans	Versioned written PFML policies, coverage dates, pay-replacement rate, insurance contract	Employer gate and leave category designation
Carrier/TPA/state	Benefit/remittance data, state mandates/payments, offsets, premium costs and allocations	Funding splits, statutory exclusions and premium method feasibility

Core entities: LeaveEpisode (one continuous real-world leave), LeaveSegment (date/reason/funding/payment component), MonthlyActivity (calendar allocation), and ReviewDecision (rule version, evidence, reviewer, outcome). Keep both the original Oracle code and normalized leave classification.

3. Deterministic decision architecture

Run screening at four distinct levels. An FMLA-purpose flag is not a final Section 45S determination. A mixed episode may require separate classifications for each day, pay source, reason, or plan component.

Gate	Questions the rule service must answer	Output
A. Employer	Is a qualifying written policy in force? Are required duration/replacement and non-interference conditions satisfied? What legal entities must be aggregated?	Employer status: Pass / Fail / Review
B. Individual	What are tenure, customary hours, applicable compensation threshold, and any 2026 service election?	Employee status: Pass / Fail / Review
C. Leave purpose	Does the documented, policy-designated purpose match the applicable FMLA purpose? Is it generic PTO/sick/personal leave?	Purpose: Potentially qualifying / Excluded / Unclear
D. Creditable amount	Which employer-paid wages or qualifying premiums are supported? Which amounts are state-mandated, state-funded, duplicate, unallocated, over cap or otherwise disallowed?	Segment-level included / excluded / unresolved amounts

Core decision logic / illustrative rules

- RULE-01: Every recorded absence remains in the ALL LEAVE universe, even if excluded from the tax-credit universe.
- RULE-02: Unknown employer policy, person eligibility, FMLA-purpose evidence, or payroll funding creates REVIEW REQUIRED, never automatic eligibility.
- RULE-03: Evaluate leave dates against effective-dated policy and tax-year rules; split episodes that cross years, months or changes in funding.
- RULE-04: For 2025, do not screen insurance premiums as a standalone credit method. For 2026, use separate wage and premium pathways and prevent double counting of funded benefits.
- RULE-05: Preserve state/local mandate and government-funded portions distinctly. For 2026, such leave can matter to employer eligibility but generally cannot be included in the credit calculation.
- RULE-06: Return proposed classifications, source IDs, rule IDs and missing evidence; require human affirmation before a tax-advisor-ready result.

4. Example: one leave, several tax treatments

Illustrative: a 12-day parental leave crosses two pay arrangements. The agent never assigns a single tax-credit label to the entire event. It creates funding-aware segments for review.

Segment	Description	Screening outcome
Days 1–6	Employer voluntary paid parental leave; employer-funded wage replacement	Potential wage-method candidate; verify policy and employee eligibility
Days 7–10	State-mandated or state-funded payment	Track in Leave Intelligence, separately excluded from credit amount
Days 11–12	Unpaid leave	Count toward leave duration, no wage-method credit amount

The example is a classification illustration, not a proposed credit calculation. If premiums fund any component, a separate 2026 premium allocation and no-double-counting test is required.

5. Agent workflow for Oracle AI Agent Studio

Step	Agent / tool responsibility	Control
1. Retrieve	Read-only Oracle Fusion Absences REST / approved business objects; historical extract and incremental updates	Authorized roles, pagination, immutable source IDs
2. Enrich	Join worker, payroll, policy, carrier/TPA, state and premium data; record absent sources	Data completeness scores and lineage
3. Normalize	Map local absence types to controlled categories; group intervals into episodes; split monthly/financial segments	Versioned mappings, deterministic segment creation
4. Evaluate	Call tax-year-specific deterministic decision service for employer, employee, purpose and funding gates	Rule IDs, explanations, reproducible outputs
5. Investigate	AI explains exceptions, suggests where to look for support and assembles review packets	No AI-only tax eligibility or amount
6. Review	Human confirms or rejects proposals; system updates approved review disposition	Identity, timestamp, evidence and approval trail
7. Report	2025 baseline, 2026 month-by-month summaries, person details and qualifying-amount candidates	Source reconciliation and tax-advisor-ready export

Oracle AI Agent Studio supports business-object, document, External REST and MCP tools, workflows and human approval steps. Use a workflow (rather than an unconstrained open-ended agent) to keep the calculation steps repeatable.

6. Dashboard and reviewer experience

Dashboard element	Metric or interaction
2025 retrospective	Total episodes and employees; duration; leave-type distribution; verified employer-paid wages; 2025-screened candidates; exclusions and unknowns
2026 monthly overview	New vs active vs ended leave events; types by month; paid/unpaid; employer-funded vs state/carrier; candidate vs review-required
Employee leave dossier	Select employee > all episodes > reason/date timeline > monthly segments > payment and policy records
Human review queue	Sort by materiality, missing source, uncertain classification, mixed funding, policy gap and review owner
Evidence drill-through	Oracle ID, source payload fingerprint, as-of timestamp, source policy excerpt, rules applied, overrides and approval

Counting definitions (avoid misleading results)

- Define “new leave” by first start date, “active leave” by overlap with each month, “completed leave” by end/status; never add active monthly counts to derive annual unique episodes.
- Allocate days/hours by actual month overlap; report money by payroll payment date and optionally by earned leave period, clearly labeled as different views.
- For overlapping/intermittent records, avoid duplicate episode or day totals; separately retain individual record IDs and source transactions.

7. Hackathon MVP: 90-minute demonstration path

Use a de-identified/synthetic subset of approximately 100–300 leave records rather than expecting an enterprise payroll integration in a short lab. Preserve a path from each row back to its mocked Oracle absence ID.

Demo scene	What to show
A. Ask the agent	"Summarize all leaves overlapping 2025, by month and type, with paid amounts where verified."
B. Ask for 2026	"Show monthly new and active leaves, year-to-date, including categories and unresolved payments."
C. Select a worker	"Show all leave episodes for employee E-104 and split episode L-207 by reason, month and funding."
D. Trigger an exception	Show a generic PTO leave, an unknown policy, and a mixed state/employer-funded period flagged rather than approved.
E. Human approval	Reviewer selects an outcome, sees supporting facts and rules, and preserves a decision audit record.

Success criteria

- Reconcile extracted absence IDs and monthly totals to the sample source without duplication.
- Demonstrate 2025 and 2026 separate, versioned rules and at least one partially qualifying episode.
- Never fabricate paid amounts from leave duration alone; unknown amounts remain "not reconciled."
- Provide traceable reasons for every proposed inclusion, exclusion and review hold.

8. Risks, exclusions and design guardrails

- No PHI or private medical narratives in the LLM prompt when a coded leave purpose suffices. For the hackathon use synthetic/de-identified records; in production apply minimum-necessary permissions, consent/contract controls, encryption, audit and retention policies.
- Do not use Oracle read access to modify employee leave, payroll, plan or benefit elections. The MVP is read-only outside its own review metadata.
- A normal absence record does not necessarily contain payroll payments, carrier reimbursements, plan-level eligibility or employer-wide policy rules. Treat each as a separately validated integration.
- Do not equate FMLA statutory eligibility with Section 45S qualifying employee status. FMLA purposes supply a leave-purpose taxonomy; Section 45S has its own employer, employee, policy, pay and exclusion tests.
- The credit estimate is nonbinding and subject to legal/tax advisor review. Maintain statutory references and effective dates as versioned business rules.

9. Starter prompt for the hackathon agent

Agent role. You are the BeneSphere Oracle Leave Intelligence Analyst. Retrieve authorized Oracle HCM leave records for a requested year or date range. Return all leave activity with source IDs and period metrics. Classify recorded absence types against a maintained taxonomy but do not infer missing reasons or payments. For potential Section 45S screening, call the versioned deterministic rule service; never make a final tax conclusion or invent policy, wages, premiums or employment facts. Split any episode when purpose, tax year, funding or payment changes. Show included, excluded and unresolved components separately, with reason codes and missing evidence. Route ambiguous findings for human review. Provide aggregated reports by month/type and a person-level chronology only to an authorized viewer. Never write changes back to Oracle Absence Management.

10. Open implementation decisions

Decision	Owner / next answer
Hackathon platform	Confirm whether the event provides Fusion AI Agent Studio, an OCI custom app stack, or an

	isolated demo tenant
Oracle availability	Confirm HCM Absences read privileges, export history, pagination limits and available absence code definitions
Payment data	Identify source for employer wage-replacement amounts, carrier offsets and insurance premiums
Policy evidence	Provide two sample effective-dated written policies and an approved absence-type mapping
Fiscal calendar	Confirm legal entities, controlled-group scope, 2025/2026 taxable-year boundaries and tax-advisor rule owner
MVP dataset	Use synthetic 2025 and 2026 episodes including intermittent, cross-year, mixed-paid and excluded examples

References and technical basis

Oracle Fusion HCM Absences REST: https://docs.oracle.com/en/cloud/saas/human-resources/farws/op-absences-get.html

Oracle Fusion AI Agent Studio tools/workflows: https://docs.oracle.com/en/cloud/saas/fusion-ai/26b/aiaas/get-started.html

Oracle existing Leave and Absence Analyst: https://docs.oracle.com/en/cloud/saas/readiness/hcm/25c/amg-25c/25C-absence-mgmt-wn-f39419.htm

IRS Notice 2026-28: https://www.irs.gov/irb/2026-34_irb

IRS Notice 2018-71: https://www.irs.gov/pub/irs-drop/n-18-71.pdf

26 USC 45S: https://uscode.house.gov/us/usc/119-121/t26/s45S/

29 USC 2612 FMLA purposes: https://uscode.house.gov/us/usc/119-118/t29/s2612/

Scope note: This is a use-case and business-rule design worksheet. Final eligibility tests, allocation methods and credit computations require validated employer facts and qualified tax/legal review.