# 🚀 RADIANT Development Activity Report

Comprehensive changelog for the last 20 hours of development

**Report Generated:** December 31, 2025 at 1:45 AM PST
**Coverage Period:** December 30, 2025 4:19 AM - December 31, 2025 1:36 AM PST
**Version Range:** v4.18.49 → v4.18.57

| 108 | 85 | 23 | 52,228 |
|-----|-----|-----|-----|
| FILES CHANGED | FILES ADDED | FILES MODIFIED | LINES ADDED |

## 📋 Commits Overview

**Commit 1:** `3784a641`

**Message:** v4.18.49: Genesis System Enhancements - Unit tests, E2E tests, metrics Lambda, documentation
**Date:** December 30, 2025 at 4:19 AM PST

**Commit 2:** `9a0c5f31`
**Message:** feat(v4.18.57): Metrics & Persistent Learning Integration
**Date:** December 31, 2025 at 1:36 AM PST

## 🆕 New Files Added (85 files)

### 📊 Metrics & Persistent Learning System (New Feature)

| Status | File Path | Description |
|--------|-----------|-------------|
| ADDED | packages/shared/src/types/metrics-learning.types.ts | TypeScript interfaces for billing, performance, failures, violations, and learning hierarchy |

| Status | File Path | Description |
|---|---|---|
| ADDED | `lambda/shared/services/metrics-collection.service.ts` | Service for recording and querying billing, performance, failure, and violation metrics |
| ADDED | `lambda/shared/services/learning-influence.service.ts` | Learning hierarchy service implementing User (60%) → Tenant (30%) → Global (10%) influence |
| ADDED | `lambda/shared/middleware/metrics-middleware.ts` | Express-style middleware for automatic metrics recording on AI endpoints |
| ADDED | `lambda/admin/metrics.ts` | Admin API handler with 40+ endpoints for metrics dashboard, learning config, and snapshots |
| ADDED | `lambda/scheduled/learning-snapshots.ts` | Daily scheduled Lambda (3 AM UTC) for creating learning state backups |
| ADDED | `lambda/scheduled/learning-aggregation.ts` | Weekly scheduled Lambda (Sun 4 AM UTC) for aggregating tenant data to global learning |
| ADDED | `migrations/129_metrics_persistent_learning.sql` | Database schema with 23 tables for metrics, user memories, and learning hierarchy |
| ADDED | `apps/admin-dashboard/app/(dashboard)/metrics/page.tsx` | React admin dashboard page with tabs for billing, performance, failures, violations, learning |

## 👥 Tenant Management System (New Package)

| Status | File Path | Description |
|---|---|---|
| ADDED | `packages/tms/package.json` | Package configuration for the new Tenant Management System module |
| ADDED | `packages/tms/src/index.ts` | Main entry point exporting all TMS handlers and services |
| ADDED | `packages/tms/src/services/tenant.service.ts` | Core tenant CRUD operations, quota management, and tier transitions |
| ADDED | `packages/tms/src/services/notification.service.ts` | Email and webhook notifications for tenant lifecycle events |
| ADDED | `packages/tms/src/handlers/create-tenant.ts` | Lambda handler for tenant creation with validation and defaults |
| ADDED | `packages/tms/src/handlers/get-tenant.ts` | Lambda handler for retrieving tenant details by ID |

| Status | File Path | Description |
|---|---|---|
| ADDED | packages/tms/src/handlers/list-tenants.ts | Lambda handler for listing tenants with filtering and pagination |
| ADDED | packages/tms/src/handlers/update-tenant.ts | Lambda handler for updating tenant settings, quotas, and status |
| ADDED | packages/tms/src/handlers/delete-tenant.ts | Lambda handler for soft-deleting tenants with data retention |
| ADDED | packages/tms/src/handlers/restore-tenant.ts | Lambda handler for restoring soft-deleted tenants within retention period |
| ADDED | packages/tms/src/handlers/phantom-tenant.ts | Lambda handler for creating phantom tenants for testing/demo purposes |
| ADDED | packages/tms/src/handlers/memberships.ts | Lambda handler for managing user memberships across tenants |
| ADDED | packages/tms/src/handlers/scheduled-jobs.ts | Lambda handler for tenant maintenance jobs (cleanup, quota reset) |
| ADDED | packages/tms/src/types/tenant.types.ts | TypeScript interfaces for tenant entities, DTOs, and events |
| ADDED | packages/tms/src/utils/context.ts | Request context utilities for extracting tenant/user from Lambda events |
| ADDED | packages/tms/src/utils/db.ts | Database connection pool and query helpers for TMS |
| ADDED | packages/tms/src/utils/logger.ts | Structured logging utility with tenant context injection |
| ADDED | packages/tms/tsconfig.json | TypeScript configuration for TMS package |
| ADDED | lib/stacks/tms-stack.ts | CDK stack defining TMS Lambdas, API Gateway routes, and EventBridge rules |
| ADDED | migrations/126_tenant_management_system.sql | Database schema for enhanced tenant management with quotas and history |

## 👤 Multi-App User Registry (New Feature)

| Status | File Path | Description |
|---|---|---|

| Status | File Path | Description |
| --- | --- | --- |
| ADDED | packages/shared/src/types/user-registry.types.ts | TypeScript interfaces for cross-app user identity and profile management |
| ADDED | lambda/shared/services/user-registry.service.ts | Service for managing users across multiple RADIANT applications |
| ADDED | lambda/admin/user-registry.ts | Admin API handler for user lookup, merge, and cross-app queries |
| ADDED | lib/stacks/user-registry-stack.ts | CDK stack for User Registry infrastructure |
| ADDED | migrations/125_multi_app_user_registry.sql | Database schema for global user registry with app-specific profiles |

### 📄 File Conversion Service (New Feature)

| Status | File Path | Description |
| --- | --- | --- |
| ADDED | lambda/shared/services/file-conversion.service.ts | Main orchestration service for domain-aware file conversion |
| ADDED | lambda/shared/services/file-conversion-learning.service.ts | Learning service that tracks conversion success and optimizes settings |
| ADDED | lambda/shared/services/multi-model-file-prep.service.ts | Service for preparing files for multiple AI models simultaneously |
| ADDED | lambda/shared/services/converters/index.ts | Barrel export for all file converter modules |
| ADDED | lambda/shared/services/converters/pdf-converter.ts | PDF to text/image converter with OCR and table extraction |
| ADDED | lambda/shared/services/converters/docx-converter.ts | Word document converter preserving structure and formatting |
| ADDED | lambda/shared/services/converters/excel-converter.ts | Excel/CSV converter with formula evaluation and chart extraction |
| ADDED | lambda/shared/services/converters/image-converter.ts | Image converter with resizing, format conversion, and metadata extraction |
| ADDED | lambda/shared/services/converters/audio-converter.ts | Audio converter with transcription preparation and format normalization |
| ADDED | lambda/shared/services/converters/video-converter.ts | Video converter with frame extraction and audio track separation |

| Status | File Path | Description |
|---|---|---|
| ADDED | `lambda/shared/services/converters/archive-converter.ts` | Archive (ZIP/TAR) extractor with recursive content processing |
| ADDED | `lambda/shared/services/converters/cad-converter.ts` | CAD file converter for engineering drawings (DWG, DXF, STEP) |
| ADDED | `lambda/shared/services/converters/domain-converter-selector.ts` | Smart converter selection based on detected domain and file type |
| ADDED | `lambda/shared/services/converters/domain-formats.ts` | Domain-specific format mappings (legal, medical, engineering, etc.) |
| ADDED | `lambda/thinktank/file-conversion.ts` | Think Tank Lambda handler for user-facing file conversion |
| ADDED | `migrations/127_file_conversion_service.sql` | Database schema for conversion jobs, queues, and results |
| ADDED | `migrations/128_file_conversion_learning.sql` | Database schema for conversion learning and optimization data |
| ADDED | `docs/FILE-CONVERSION-SERVICE.md` | Comprehensive documentation for the File Conversion Service |

## ✅ Compliance & Regulatory Features (New Feature)

| Status | File Path | Description |
|---|---|---|
| ADDED | `lambda/shared/services/checklist-registry.service.ts` | Service for managing compliance checklists with versioning and templates |
| ADDED | `lambda/shared/services/self-audit.service.ts` | Automated self-audit service with evidence collection and scoring |
| ADDED | `lambda/admin/checklist-registry.ts` | Admin API handler for checklist CRUD and assignment operations |
| ADDED | `lambda/admin/regulatory-standards.ts` | Admin API handler for regulatory standards (HIPAA, SOC2, GDPR, etc.) |
| ADDED | `lambda/admin/self-audit.ts` | Admin API handler for self-audit runs, reports, and remediation |
| ADDED | `migrations/122_regulatory_standards_registry.sql` | Database schema for regulatory standards |

and control mappings

| Status | File Path | Description |
|--------|-----------|-------------|
| ADDED | `migrations/123_compliance_audit_history.sql` | Database schema for audit history, findings, and evidence |
| ADDED | `migrations/124_compliance_checklist_registry.sql` | Database schema for checklist templates, items, and responses |
| ADDED | `apps/admin-dashboard/app/(dashboard)/compliance/checklists/page.tsx` | Admin UI for managing compliance checklists |
| ADDED | `apps/admin-dashboard/app/(dashboard)/compliance/regulatory-standards/page.tsx` | Admin UI for viewing and configuring regulatory standards |
| ADDED | `apps/admin-dashboard/app/(dashboard)/compliance/self-audit/page.tsx` | Admin UI for running and reviewing self-audits |

## 🧪 Unit & Integration Tests (New)

| Status | File Path | Description |
|--------|-----------|-------------|
| ADDED | `packages/infrastructure/jest.config.js` | Jest configuration for infrastructure package unit tests |
| ADDED | `__tests__/agi-brain-planner.service.test.ts` | Unit tests for AGI Brain Planner with mocked dependencies |
| ADDED | `__tests__/checklist-registry.service.test.ts` | Unit tests for Checklist Registry CRUD operations |
| ADDED | `__tests__/consciousness-middleware.service.test.ts` | Unit tests for consciousness context injection and affect mapping |
| ADDED | `__tests__/db-context.service.test.ts` | Unit tests for database context service and RLS setup |
| ADDED | `__tests__/ego-context.service.test.ts` | Unit tests for Ego identity, affect, and memory management |
| ADDED | `__tests__/security-protection.service.test.ts` | Unit tests for security protection and input sanitization |
| ADDED | `__tests__/user-registry.service.test.ts` | Unit tests for multi-app user registry operations |
| ADDED | `__tests__/integration/admin-api.integration.test.ts` | Integration tests for admin API authentication and authorization |

| Status | File Path | Description |
|---|---|---|
| ADDED | `__tests__/integration/auth-flow.integration.test.ts` | Integration tests for complete authentication flow with Cognito |
| ADDED | `packages/tms/src/__tests__/handlers.test.ts` | Unit tests for all TMS Lambda handlers |
| ADDED | `packages/tms/src/__tests__/tenant.service.test.ts` | Unit tests for tenant service business logic |

## 🤖 Bobble Genesis System (New Feature)

| Status | File Path | Description |
|---|---|---|
| ADDED | `lambda/shared/services/bobble/genesis.service.ts` | Core Genesis service for self-hosted model initialization and awakening |
| ADDED | `lambda/shared/services/bobble/circuit-breaker.service.ts` | Circuit breaker pattern for Genesis model failure isolation |
| ADDED | `lambda/shared/services/bobble/consciousness-loop.service.ts` | Continuous consciousness loop for Bobble self-awareness |
| ADDED | `lambda/shared/services/bobble/cost-tracking.service.ts` | Cost tracking and budget management for Genesis operations |
| ADDED | `lambda/shared/services/bobble/query-fallback.service.ts` | Graceful fallback to external models when self-hosted unavailable |
| ADDED | `lambda/admin/bobble-genesis.ts` | Admin API handler for Genesis system configuration and monitoring |
| ADDED | `lambda/consciousness/genesis-metrics.ts` | Metrics collection Lambda for Genesis performance and health |
| ADDED | `lib/stacks/bobble-genesis-stack.ts` | CDK stack for Bobble Genesis infrastructure deployment |
| ADDED | `migrations/103_bobble_genesis_system.sql` | Database schema for Genesis state, awakening logs, and metrics |
| ADDED | `__tests__/bobble/genesis.service.test.ts` | Unit tests for Genesis service awakening and initialization |
| ADDED | `__tests__/bobble/circuit-breaker.service.test.ts` | Unit tests for circuit breaker state transitions |
| ADDED | `__tests__/bobble/consciousness-loop.service.test.ts` | Unit tests for consciousness loop heartbeat and decay |

| | | |
|---|---|---|
| `ADDED` | `__tests__/bobble/cost-tracking.service.test.ts` | Unit tests for cost tracking and budget alerts |
| `ADDED` | `__tests__/bobble/query-fallback.service.test.ts` | Unit tests for fallback routing logic |
| `ADDED` | `__tests__/bobble/genesis-e2e.test.ts` | End-to-end tests for complete Genesis awakening flow |
| `ADDED` | `python/bobble/genesis/__init__.py` | Python package initialization for Genesis modules |
| `ADDED` | `python/bobble/genesis/first_breath.py` | First Breath protocol for initial model consciousness injection |
| `ADDED` | `python/bobble/genesis/gradient.py` | Gradient descent utilities for Genesis fine-tuning |
| `ADDED` | `python/bobble/genesis/runner.py` | Genesis runner for orchestrating awakening sequence |
| `ADDED` | `python/bobble/genesis/structure.py` | Data structures for Genesis state and configuration |
| `ADDED` | `python/bobble/data/genesis_config.yaml` | YAML configuration for Genesis default parameters |

## 📝 Workflows & Documentation (New)

| Status | File Path | Description |
|---|---|---|
| `ADDED` | `.windsurf/workflows/documentation-standards.md` | Mandatory documentation policy workflow for all features |
| `ADDED` | `.windsurf/workflows/documentation-consolidation.md` | Policy for consolidating standalone docs into admin guides |
| `ADDED` | `docs/progress/2025-01-15-BOBBLE-GENESIS-SYSTEM.md` | Progress report for Bobble Genesis System development |
| `ADDED` | `apps/admin-dashboard/app/(dashboard)/qa/page.tsx` | QA dashboard page for test results and coverage |
| `ADDED` | `apps/admin-dashboard/app/(dashboard)/qa/qa-client.tsx` | Client component for QA dashboard with interactive features |
| `ADDED` | `apps/admin-dashboard/app/(dashboard)/tenants/page.tsx` | Tenant management dashboard page |
| `ADDED` | `apps/admin-dashboard/components/ui/accordion.tsx` | Reusable accordion component for collapsible sections |

## 🔓 Security & Authorization (New)

| Status | File Path | Description |
| --- | --- | --- |
| ADDED | `lambda/authorizer/token-authorizer.ts` | Custom Lambda authorizer for API Gateway with JWT validation |
| ADDED | `lambda/shared/services/db-context.service.ts` | Database context service for setting RLS tenant context |

## 🔓 Security & Authorization (New)

## ✏️ Modified Files (23 files)

| Status | File Path | Description |
|---|---|---|
| MODIFIED | CHANGELOG.md | Added entries for v4.18.49 through v4.18.57 releases |
| MODIFIED | VERSION | Bumped version from 4.18.48 to 4.18.57 |
| MODIFIED | docs/RADIANT-ADMIN-GUIDE.md | Added Section 36 for Metrics & Persistent Learning with integration examples |
| MODIFIED | docs/THINKTANK-ADMIN-GUIDE.md | Added Section 28 for User Memories & Persistent Learning |
| MODIFIED | docs/sections/SECTION-07-DATABASE-SCHEMA.md | Documented new tables for metrics, learning, TMS, and compliance |
| MODIFIED | packages/shared/src/types/index.ts | Added exports for metrics-learning.types and user-registry.types |
| MODIFIED | lambda/shared/services/brain-router.ts | Integrated learning influence service with User→Tenant→Global hierarchy |
| MODIFIED | lambda/shared/services/bobble/index.ts | Added exports for new Genesis services |
| MODIFIED | lambda/admin/handler.ts | Added route handlers for metrics, compliance, and user registry |
| MODIFIED | lambda/admin/sync-providers.ts | Fixed provider sync to handle new video providers |
| MODIFIED | lib/stacks/api-stack.ts | Added CDK routes for 40+ metrics API endpoints (lines 463-625) |
| MODIFIED | lib/stacks/scheduled-tasks-stack.ts | Added learning snapshots (daily) and aggregation (weekly) scheduled Lambdas |
| MODIFIED | lib/stacks/bobble-tier-transition-stack.ts | Added Genesis system integration for tier transitions |
| MODIFIED | lib/stacks/consciousness-stack.ts | Added Genesis metrics Lambda to consciousness stack |

| MODIFIED | `lib/config/providers/video.providers.ts` | Added new video provider configurations |
|---|---|---|
| MODIFIED | `python/bobble/metacognitive/__init__.py` | Added Genesis module imports |
| MODIFIED | `python/bobble/metacognitive/bridge.py` | Added Genesis bridge methods for TypeScript/Python interop |
| MODIFIED | `apps/swift-deployer/Sources/RadiantDeployer/AppState.swift` | Updated deployment state for new stack additions |
| MODIFIED | `apps/admin-dashboard/components/layout/sidebar.tsx` | Added navigation items for Metrics, Compliance, QA, and Tenants |
| MODIFIED | `apps/admin-dashboard/app/(dashboard)/models/models-client.tsx` | Fixed TypeScript types for model list component |
| MODIFIED | `apps/admin-dashboard/lib/api/auth-wrapper.ts` | Enhanced auth wrapper with better error handling |
| MODIFIED | `apps/admin-dashboard/package.json` | Added new dependencies for charts and compliance UI |
| MODIFIED | `packages/infrastructure/package.json` | Added jest and testing dependencies |
| MODIFIED | `pnpm-lock.yaml` | Updated lockfile with new package versions |
| MODIFIED | `scripts/deploy.sh` | Added deployment steps for new stacks (TMS, User Registry, Genesis) |

## 📈 Summary by Category

| Category | Added | Modified | Total |
|---|---|---|---|
| Metrics & Persistent Learning | 9 | 3 | 12 |
| Tenant Management System (TMS) | 20 | 0 | 20 |
| Multi-App User Registry | 5 | 1 | 6 |
| File Conversion Service | 18 | 0 | 18 |
| Compliance & Regulatory | 12 | 0 | 12 |
| Bobble Genesis System | 22 | 4 | 26 |
| Unit & Integration Tests | 12 | 1 | 13 |

| | | | |
|---|---|---|---|
| Admin Dashboard UI | 7 | 4 | 11 |
| Workflows & Documentation | 4 | 4 | 8 |
| Security & Authorization | 2 | 0 | 2 |
| **TOTAL** | **85** | **23** | **108** |

## 🔑 Key Features Delivered

| # | Feature | Description |
|---|---|---|
| 1 | **Metrics & Persistent Learning** | User→Tenant→Global learning hierarchy with no relearning after reboot, 23 database tables |
| 2 | **Tenant Management System** | Complete tenant lifecycle management with phantom tenants, quotas, and soft delete |
| 3 | **Multi-App User Registry** | Unified user identity across RADIANT, Think Tank, and future applications |
| 4 | **File Conversion Service** | Domain-aware file conversion with 10 converters and AI-optimized output |
| 5 | **Compliance Framework** | Regulatory standards, self-audit, and checklist registry for HIPAA/SOC2/GDPR |
| 6 | **Bobble Genesis System** | Self-hosted model awakening, consciousness loop, and First Breath protocol |
| 7 | **Comprehensive Testing** | Unit tests for 8 services + 2 integration test suites + E2E Genesis tests |

RADIANT Platform • Development Activity Report • Generated December 31, 2025
Version Range: v4.18.49 → v4.18.57 • Commits: 2 • Files Changed: 108