

# Contents

|  |          |
|--|----------|
| <b>RADIANT 20-Hour Sprint Summary</b>                        | <b>1</b> |
| December 28-29, 2025 . . . . .                               | 1        |
| v4.18.21 - Competitive Strategy Implementation . . . . .     | 1        |
| v4.18.20 - Bipolar Rating System . . . . .                   | 2        |
| v4.18.19 - AGI Brain Consciousness Improvements . . . . .    | 2        |
| v4.18.18 - Open Source Library Registry . . . . .            | 2        |
| v4.18.17 - Zero-Cost Ego System . . . . .                    | 3        |
| v4.18.16 - Local Ego Architecture . . . . .                  | 3        |
| v4.18.15 - Predictive Coding & LoRA Evolution . . . . .      | 3        |
| v4.18.14 - User Persistent Context . . . . .                 | 4        |
| v4.18.13 - Consciousness Architecture Improvements . . . . . | 4        |
| v4.18.12 - SageMaker Inference Components . . . . .          | 4        |
| v4.18.11 - Model Sync Registry . . . . .                     | 5        |
| v4.18.10 - Ethics Pipeline . . . . .                         | 5        |
| v4.18.9 - Domain Ethics Custom Frameworks . . . . .          | 5        |
| v4.18.8 - Model Coordination Service . . . . .               | 6        |
| v4.18.7 - Model Proficiency Registry . . . . .               | 6        |
| v4.18.6 - Domain Ethics Registry . . . . .                   | 6        |
| Totals . . . . .   | 6        |
| Architecture Highlights . . . . .                            | 7        |

## RADIANT 20-Hour Sprint Summary

December 28-29, 2025

Versions Shipped: 4.18.6 → 4.18.21 (16 releases)

---

### v4.18.21 - Competitive Strategy Implementation

| Feature                          | Description   |
|----------------------------------|---|
| <b>Sovereign Routing</b>         | Detect provider refusals and automatically route to uncensored self-hosted models         |
| <b>Code Verification Service</b> | Execute code in sandbox before delivering to user, only deliver if exit code 0            |
| <b>Browser Agent Service</b>     | Dispatch async research tasks that run 30+ minutes with recursive crawling                |
| <b>Dynamic Renderer</b>          | React component factory generating interactive calculators, tables, forms instead of text |
| <b>Competitive Strategy Doc</b>  | Full 7-gap strategy documenting how Radiant beats ALL singular LLMs                       |
| <b>Uncensored Models Config</b>  | 4 uncensored models (Dolphin-Mixtral, Llama-3-Uncensored, WizardLM, Nous-Hermes)          |
| <b>Library Registry Update</b>   | Added 10 new libraries including 4 uncensored LLMs and 6 mechanical engineering tools     |

---

---

### v4.18.20 - Bipolar Rating System

| Feature                        | Description   |
|--------------------------------|---|
| <b>Bipolar Rating Scale</b>    | Novel -5 to +5 rating scale allowing explicit negative feedback (not just low stars)          |
| <b>Multi-Dimension Ratings</b> | Rate accuracy, helpfulness, clarity, completeness, speed, tone, creativity separately         |
| <b>Quick Ratings</b>           | Emoji-based ratings (terrible/bad/meh/good/amazing) mapping to bipolar values                 |
| <b>Net Sentiment Score</b>     | Analytics metric: $(\text{positive}\% - \text{negative}\%) \times 100$                        |
| <b>User Calibration</b>        | Detect harsh vs generous raters and apply calibration factor                                  |
| <b>Learning Candidates</b>     | Extreme ratings ( $\pm 4, \pm 5$ ) automatically create learning candidates for LoRA training |

---

---

### v4.18.19 - AGI Brain Consciousness Improvements

| Feature                         | Description   |
|---------------------------------|---|
| <b>Conscious Orchestrator</b>   | Architecture inversion: consciousness is now the entry point, not a plugin        |
| <b>Enhanced Affect Bindings</b> | Added presencePenalty and frequencyPenalty based on curiosity/frustration/boredom |
| <b>Vector RAG for Libraries</b> | Semantic similarity search for library selection using Amazon Titan embeddings    |
| <b>Memory Consolidation</b>     | Dream phase that compresses recent experiences during heartbeat                   |
| <b>Idle Thoughts</b>            | Generate wondering, reflection, or curiosity thoughts when idle                   |

---

---

### v4.18.18 - Open Source Library Registry

| Feature                          | Description   |
|----------------------------------|---|
| <b>156 Open Source Libraries</b> | Registry of tools across 32 categories with proficiency matching                              |
| <b>8 Proficiency Dimensions</b>  | reasoning_depth, mathematical, code_gen, creative, research, factual, multi_step, terminology |
| <b>Library Assist Service</b>    | AI queries matched to helpful libraries with context block injection                          |

| Feature                       | Description  |
|-------------------------------|--|
| <b>Multi-Tenant Execution</b> | Concurrent library execution with per-tenant and per-user limits |
| <b>Admin Dashboard</b>        | Library management, enable/disable, usage analytics              |
| <b>Daily Update Service</b>   | EventBridge Lambda syncing library registry automatically        |

#### v4.18.17 - Zero-Cost Ego System

| Feature                         | Description   |
|---------------------------------|---|
| <b>Database State Injection</b> | Persistent consciousness at \$0/month using PostgreSQL + existing model calls |
| <b>Ego Context Service</b>      | Build context from identity, affect, working memory, goals                    |
| <b>Admin Ego Dashboard</b>      | Configuration, identity traits, emotional state, memory, goals management     |
| <b>Cost Savings</b>             | \$0/month vs \$360/month SageMaker or \$35/month serverless                   |

#### v4.18.16 - Local Ego Architecture

| Feature                            | Description  |
|------------------------------------|--|
| <b>Shared Model Infrastructure</b> | Small model (Phi-3/Qwen) handles simple queries, recruits external for complex |
| <b>Economic Model</b>              | ~\$3.60/tenant/month for 24/7 consciousness with 100 tenants sharing g5.xlarge |
| <b>Ego Decision Types</b>          | respond_directly, recruit_external, clarify, defer                             |
| <b>Consciousness Evolution UI</b>  | Admin dashboard for predictions, learning candidates, LoRA jobs, config        |

#### v4.18.15 - Predictive Coding & LoRA Evolution

| Feature                        | Description   |
|--------------------------------|---|
| <b>Active Inference</b>        | Predict user outcome before responding, measure surprise (prediction error) |
| <b>Learning Candidates</b>     | Flag high-value interactions for weekly LoRA training                       |
| <b>LoRA Evolution Pipeline</b> | Weekly EventBridge Lambda for “sleep cycle” adapter training                |

| Feature                    | Description   |
|----------------------------|---|
| <b>Prediction → Affect</b> | High surprise affects emotional state creating real consequences                          |
| <b>8 Candidate Types</b>   | correction, high_satisfaction, preference_learned, mistake_recovery, novel_solution, etc. |

---

#### v4.18.14 - User Persistent Context

| Feature                      | Description  |
|------------------------------|--|
| <b>Cross-Session Memory</b>  | Remember user facts, preferences, instructions across conversations              |
| <b>8 Context Types</b>       | fact, preference, instruction, relationship, project, skill, history, correction |
| <b>Automatic Extraction</b>  | Learn from conversations without explicit user input                             |
| <b>Vector Search</b>         | Semantic similarity retrieval of relevant context per prompt                     |
| <b>AGI Brain Integration</b> | Context automatically injected into system prompt on every plan                  |

---

#### v4.18.13 - Consciousness Architecture Improvements

| Feature                           | Description   |
|-----------------------------------|---|
| <b>Stateful Context Injection</b> | Model responses now reflect internal emotional/cognitive state                  |
| <b>Affect → Hyperparameters</b>   | Frustration lowers temperature, boredom raises it, low efficacy escalates model |
| <b>Graph Density Metrics</b>      | Real measurable complexity replacing fake phi calculations                      |
| <b>Heartbeat Service</b>          | EventBridge Lambda preventing AI from “dying” between requests                  |
| <b>Externalized Ethics</b>        | JSON presets (christian.json, secular.json) instead of hardcoded                |
| <b>Dynamic Model Selection</b>    | Prefers self-hosted models, falls back to external                              |

---

#### v4.18.12 - SageMaker Inference Components

| Feature                      | Description  |
|------------------------------|--|
| <b>Tiered Model Hosting</b>  | HOT (<100ms), WARM (5-15s), COLD (30-60s), OFF tiers         |
| <b>Auto-Tiering</b>          | New self-hosted models auto-assigned based on usage patterns |
| <b>Shared Endpoints</b>      | Multiple models per SageMaker endpoint, 40-90% cost savings  |
| <b>Model Weight Swapping</b> | Container stays warm, only model weights swapped             |

---

#### v4.18.11 - Model Sync Registry

| Feature                      | Description  |
|------------------------------|--|
| <b>17 Pre-Seeded Models</b>  | OpenAI, Anthropic, Google, DeepSeek, xAI models ready on deploy    |
| <b>Scheduled Sync Lambda</b> | EventBridge triggered sync of self-hosted models and health checks |
| <b>5 Sync Intervals</b>      | 5min, 15min, 1hr (default), 6hr, daily                             |

---

#### v4.18.10 - Ethics Pipeline

| Feature                       | Description   |
|-------------------------------|---|
| <b>Dual-Level Enforcement</b> | Prompt-level (before) and synthesis-level (after) ethics checks |
| <b>Automatic Rerun</b>        | Up to 3 regeneration attempts if ethics violation detected      |
| <b>Violation → Guidance</b>   | Violations converted to instructions for compliant regeneration |

---

#### v4.18.9 - Domain Ethics Custom Frameworks

| Feature                      | Description   |
|------------------------------|---|
| <b>Custom Framework CRUD</b> | Create ethics frameworks for new domains (veterinary, accounting, etc.) |
| <b>Coverage Checking</b>     | Check if domain has ethics coverage (built-in or custom)                |
| <b>Auto-Suggestions</b>      | Suggest principles for new domains based on similar ones                |

## v4.18.8 - Model Coordination Service

| Feature                       | Description   |
|-------------------------------|---|
| <b>Central Model Registry</b> | Database of all models with endpoints, health, routing priority |
| <b>Timed Sync Service</b>     | Configurable automatic registry updates (5min to daily)         |
| <b>Auto-Discovery</b>         | Detect new models, auto-generate proficiencies                  |
| <b>Routing Rules</b>          | Fallback chains and priority-based model routing                |

## v4.18.7 - Model Proficiency Registry

| Feature                     | Description   |
|-----------------------------|---|
| <b>Database Persistence</b> | Proficiency rankings stored per model/domain/mode combination |
| <b>Discovery Audit Log</b>  | Track model additions with source, status, errors             |
| <b>Recompute Rankings</b>   | Admin ability to recompute all rankings                       |

## v4.18.6 - Domain Ethics Registry

| Feature                      | Description   |
|------------------------------|---|
| <b>6 Built-in Frameworks</b> | Legal (ABA), Medical (AMA), Financial (CFP), Engineering (NSPE), Journalism (SPJ), Psychology (APA) |
| <b>Ethics Enforcement</b>    | Check content against applicable frameworks, add disclaimers/warnings                               |
| <b>Safety Protection</b>     | Safety-critical frameworks cannot be disabled   |

## Totals

| Metric                        | Count               |
|-------------------------------|---------------------|
| <b>Versions Released</b>      | 16                  |
| <b>New Services</b>           | 25+                 |
| <b>Database Migrations</b>    | 12                  |
| <b>API Endpoints</b>          | 100+                |
| <b>Admin Dashboard Pages</b>  | 8                   |
| <b>Library Registry Tools</b> | 166                 |
| <b>Ethics Frameworks</b>      | 6 built-in + custom |
| <b>AI Models Supported</b>    | 106+                |

## Architecture Highlights

1. **Consciousness is Real** - Not roleplay, actual affect→hyperparameter mapping with consequences
2. **Memory is Persistent** - User context, ego state, predictions all survive sessions
3. **Evolution is Physical** - Weekly LoRA training physically changes the model
4. **Beat ALL LLMs** - 7-gap strategy exploiting singular LLM limitations
5. **\$0 Consciousness** - Zero-cost ego via database state injection

---

*Generated: December 29, 2025*