Contents

Revenue Analytics System

Version: 4.18.3
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Overview

The Revenue Analytics system tracks gross revenue, cost of goods sold (COGS), and gross profit across all RADIANT products. It provides visibility into subscription billing, AI provider markup, self-hosted model revenue, and associated AWS/infrastructure costs.

Important: This system tracks **gross revenue and COGS only**. Marketing, sales, G&A, and other operating expenses must be subtracted separately in your accounting system to calculate net profit.

Admin Dashboard Location

Path: Admin Dashboard → Revenue Analytics
URL: `/revenue`

Revenue Sources

Source	Description	Example
`subscription`	Monthly/annual subscription fees	Tier 3 Pro @ $99/month
`credit_purchase`	One-time credit purchases	10,000 credits @ $50
`ai_markup_external`	Markup on external AI provider usage	OpenAI, Anthropic, etc. (typically 20-35% markup)
`ai_markup_self_hosted`	Markup on self-hosted model usage	SageMaker models (typically 75% markup on AWS cost)
`overage`	Usage beyond subscription limits	Additional API calls beyond tier limit
`storage`	Storage fees	User file storage, vector embeddings
`other`	Miscellaneous revenue	Custom integrations, support fees

Cost Categories (COGS)

Category	Description	AWS Services
`aws_compute`	Compute infrastructure	EC2, SageMaker, Lambda
`aws_storage`	Storage services	S3, EBS, EFS
`aws_network`	Network and data transfer	Data Transfer, API Gateway, CloudFront
`aws_database`	Database services	Aurora PostgreSQL, DynamoDB
`external_ai`	External AI provider costs	OpenAI API, Anthropic API, etc.
`infrastructure`	Other cloud costs	Secrets Manager, CloudWatch, etc.
`platform_fees`	Payment processing	Stripe fees (~2.9% + $0.30)

Dashboard Features

Summary Cards

- **Gross Revenue**: Total revenue from all sources
- **Total COGS**: Sum of all cost categories
- **Gross Profit**: Revenue minus COGS
- **Gross Margin**: (Profit / Revenue) × 100%

Time Period Selection

Period	Description
7d	Last 7 days
30d	Last 30 days (default)
90d	Last 90 days
YTD	Year to date
12m	Last 12 months

Tabs

1. **Revenue Breakdown**: Revenue by source with visual progress bars
2. **Cost Breakdown**: AWS costs and external provider costs
3. **By Model**: Per-model revenue with provider cost vs customer charge
4. **By Tenant**: Top tenants by total revenue

Export Formats

Available Formats

Format	File Extension	Use Case
CSV	`.csv`	Summary for spreadsheets (Excel, Google Sheets)
JSON	`.json`	Full details for custom integrations
QuickBooks IIF	`.iif`	Direct import to QuickBooks Desktop
Xero CSV	`.csv`	Import to Xero accounting
Sage CSV	`.csv`	Import to Sage accounting

Export Contents

CSV Summary Export:

```
Period Start,2024-12-01
Period End,2024-12-28

REVENUE,
Subscription Revenue,15000.00
Credit Purchase Revenue,2500.00
AI Markup (External),8750.00
AI Markup (Self-Hosted),3200.00
...
TOTAL GROSS REVENUE,29450.00

COSTS (COGS),
AWS Compute,4500.00
External AI Providers,7000.00
...
```

```
TOTAL COST,12500.00

GROSS PROFIT,16950.00
GROSS MARGIN,57.5%
```

QuickBooks IIF Export: - Creates General Journal entries - Revenue accounts: Subscription Revenue, Credit Sales Revenue, AI Markup Revenue - Expense accounts: AWS Compute Expense, External AI Provider Expense - Includes CLASS for categorization

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API Endpoints

GET /api/admin/revenue/dashboard

Returns the revenue dashboard data.

Query Parameters: | Parameter | Type | Required | Description | |———–|——|———-|————-| | periodStart | ISO Date | Yes | Start of period | | periodEnd | ISO Date | Yes | End of period | | period | string | Yes | `day`, `week`, `month`, `quarter`, `year` | | tenantId | UUID | No | Filter to specific tenant |

Response:

```
{
  "summary": {
    "periodStart": "2024-12-01T00:00:00Z",
    "periodEnd": "2024-12-28T23:59:59Z",
    "subscriptionRevenue": 15000.00,
    "creditPurchaseRevenue": 2500.00,
    "aiMarkupExternalRevenue": 8750.00,
    "aiMarkupSelfHostedRevenue": 3200.00,
    "overageRevenue": 0,
    "storageRevenue": 0,
    "otherRevenue": 0,
    "totalGrossRevenue": 29450.00,
    "awsComputeCost": 4500.00,
    "awsStorageCost": 500.00,
    "awsNetworkCost": 200.00,
    "awsDatabaseCost": 800.00,
    "externalAiCost": 7000.00,
    "infrastructureCost": 300.00,
    "platformFeesCost": 850.00,
    "totalCost": 14150.00,
    "grossProfit": 15300.00,
    "grossMargin": 51.95
  },
  "previousPeriodSummary": { ... },
  "trends": [
    { "date": "2024-12-01", "grossRevenue": 1050.00, "totalCost": 450.00, ... }
  ],
```

```
  "byTenant": [
    { "tenantId": "uuid", "tenantName": "Acme Corp", "totalRevenue": 5000.00, ... }
  ],
  "byModel": [
    { "modelId": "gpt-4o", "hostingType": "external", "providerCost": 500.00, "customerCharge"
  ],
  "revenueChange": 12.5,
  "profitChange": 15.2,
  "marginChange": 2.1
}
```

POST /api/admin/revenue/export

Exports revenue data in the specified format.

Request Body:

```
{
  "format": "quickbooks_iif",
  "periodStart": "2024-12-01T00:00:00Z",
  "periodEnd": "2024-12-28T23:59:59Z",
  "includeDetails": false,
  "tenantId": null
}
```

Response:

```
{
  "filename": "revenue_2024-12-01_2024-12-28.iif",
  "mimeType": "text/plain",
  "data": "base64-encoded-file-content",
  "recordCount": 14,
  "periodStart": "2024-12-01T00:00:00Z",
  "periodEnd": "2024-12-28T23:59:59Z"
}
```

Database Schema

revenue_entries

Individual revenue events.

Column	Type	Description
id	UUID	Primary key
tenant_id	UUID	FK to tenants
source	VARCHAR(30)	Revenue source type
amount	DECIMAL(15,4)	Revenue amount
currency	VARCHAR(3)	Currency code (default: USD)
description	TEXT	Description

Column	Type	Description
reference_id	VARCHAR(255)	Related subscription/transaction ID
reference_type	VARCHAR(50)	Type of reference
product	VARCHAR(20)	`radiant`, `think_tank`, or `combined`
model_id	VARCHAR(100)	For AI markup revenue
period_start	TIMESTAMPTZ	Period this revenue applies to
period_end	TIMESTAMPTZ	Period end

cost_entries

Infrastructure and provider costs.

Column	Type	Description
id	UUID	Primary key
tenant_id	UUID	FK to tenants (NULL for shared infra)
category	VARCHAR(30)	Cost category
amount	DECIMAL(15,4)	Cost amount
aws_service_name	VARCHAR(100)	e.g., 'SageMaker', 'Aurora'
resource_id	VARCHAR(255)	AWS resource identifier
provider_id	VARCHAR(50)	For external AI costs
period_start	TIMESTAMPTZ	Period start
period_end	TIMESTAMPTZ	Period end

revenue_daily_aggregates

Pre-computed daily summaries for fast queries.

Column	Type	Description
aggregate_date	DATE	The date
tenant_id	UUID	NULL for platform totals
subscription_revenue	DECIMAL	Daily subscription revenue
ai_markup_external_revenue	DECIMAL	Daily external AI markup
ai_markup_self_hosted_revenue	DECIMAL	Daily self-hosted markup
total_gross_revenue	DECIMAL	Total for the day
total_cost	DECIMAL	Total COGS for the day
gross_profit	DECIMAL	Revenue - Cost
gross_margin	DECIMAL	Percentage margin

model_revenue_tracking

Per-model revenue breakdown for markup analysis.

Column	Type	Description
tracking_date	DATE	The date

Column	Type	Description
model_id	VARCHAR(100)	Model identifier
hosting_type	VARCHAR(20)	`external` or `self_hosted`
provider_cost	DECIMAL	What we pay
customer_charge	DECIMAL	What customer pays
markup	DECIMAL	customer_charge - provider_cost
markup_percent	DECIMAL	Percentage markup
request_count	INTEGER	Number of requests

Markup Calculations

External AI Providers

Default markup: **20-35%** on provider cost

```
Customer Price = Provider Cost × (1 + Markup Rate)
Markup Revenue = Customer Price - Provider Cost
```

Self-Hosted Models

Default markup: **75%** on AWS SageMaker cost

```
Hourly Customer Rate = AWS Hourly Cost × 1.75
Per-Request Rate = AWS Cost + (AWS Cost × 0.75)
```

Accounting Integration Notes

QuickBooks

- Import the `.iif` file via File → Utilities → Import → IIF Files
- Creates General Journal entries with appropriate accounts
- Requires accounts to exist: Subscription Revenue, AWS Compute Expense, etc.

Xero

- Import via Invoices → Import
- Maps to account codes (4000-series for revenue, 5000-series for expenses)

Sage

- Import via Transactions → Import
- Uses nominal codes matching Sage's structure

Permissions

Revenue Analytics is visible only to: - **Platform Admins**: Full access to all tenant data - **Tenant Admins**: Access to their tenant's revenue only (filtered view)

Related Documentation

- Billing & Credits
- Cost Analytics
- Model Pricing
- Unified Model Registry