

Architecture Diagrams And Topology

Powering Businesses. Simplifying Growth.

VYNTRA OS System IP Package
Generated: 2026-05-20 09:49:50 UTC
Legal-safe evidence packet. Secrets, API keys, provider credentials, passwords, tokens, and environment values are intentionally excluded.

docs/architecture/ARCHITECTURE_REPORT.md

Architecture Intelligence Report

Generated by the Architecture Intelligence Agent on 2026-05-18 15:27:47 UTC. Secrets and sensitive implementation details are intentionally excluded.

Executive Summary

This report describes the current Vyntra OS System architecture using static code inspection. It documents route topology, module relationships, blueprint registrations, coupling pressure, drift signals, and deployment-relevant architecture risks without exposing secrets or sensitive implementation details.

System Topology

- Routes discovered: 176
- Modules discovered: 77
- Blueprint references discovered: 79
- Circular dependency groups: 8
- Templates discovered: 106
- Static assets discovered: 18
- Database tables discovered: 201

Layered Architecture View

Layer	Responsibility	Representative modules
Presentation	Server-rendered pages, forms, PWA assets, and client scripts.	templates, static, dashboard, admin
Workflow	Shop workflows such as sales, inventory, receipts, finance, customers, restock, and payments.	sales, inventory, receipts, finance, customers, payments, restock
Platform	Authentication, server-owner controls, backup, background tasks, deployment readiness, and observability.	auth, server, backup, background_tasks, observability, validation
Governance	Autonomous documentation, architecture, API, database, security, release, ownership, and investor records.	agents, ai, release_notes, security
Persistence	PostgreSQL production support and SQLite development fallback through shared adapters.	database, migrations, models

Blueprint Relationship View

Blueprint or symbol	URL prefix	Source	Status
agents_bp	-	app.py	yes
auth_bp	-	app.py	yes
sales_bp	-	app.py	yes
inventory_bp	-	app.py	yes
finance_bp	-	app.py	yes
alerts_bp	-	app.py	yes
reports_bp	-	app.py	yes
customers_bp	-	app.py	yes
receipt_bp	-	app.py	yes
barcode_bp	-	app.py	yes
dashboard_bp	-	app.py	yes
cashier_bp	-	app.py	yes
analytics_bp	-	app.py	yes
backup_bp	-	app.py	yes
cloud_bp	-	app.py	yes
ai_bp	-	app.py	yes
recommendations_bp	-	app.py	yes
ai_operations_bp	-	app.py	yes

```

| api_v1_bp | - | app.py | yes |
| notifications_bp | - | app.py | yes |
| realtime_bp | - | app.py | yes |
| offline_bp | - | app.py | yes |
| operations_center_bp | - | app.py | yes |
| procurement_bp | - | app.py | yes |
| customer_intelligence_bp | - | app.py | yes |
| enterprise_branches_bp | - | app.py | yes |
| workflows_bp | - | app.py | yes |
| communication_bp | - | app.py | yes |
| release_notes_bp | - | app.py | yes |
| restock_bp | - | app.py | yes |
| operations_mode_bp | - | app.py | yes |
| onboarding_bp | - | app.py | yes |
| trust_bp | - | app.py | yes |
| support_bp | - | app.py | yes |
| business_retention_bp | - | app.py | yes |
| product_analytics_bp | - | app.py | yes |
| growth_bp | - | app.py | yes |
| business_reliability_bp | - | app.py | yes |
| pilot_program_bp | - | app.py | yes |
| customer_success_bp | - | app.py | yes |
| operations_docs_bp | - | app.py | yes |
| billing_bp | - | app.py | yes |
| demo_system_bp | - | app.py | yes |
| brand_experience_bp | - | app.py | yes |
| product_intelligence_bp | - | app.py | yes |
| growth_engine_bp | - | app.py | yes |
| market_validation_bp | - | app.py | yes |
| company_operations_bp | - | app.py | yes |
| business_activity_bp | - | app.py | yes |
| playbooks_bp | - | app.py | yes |
| product_feedback_bp | - | app.py | yes |
| trust_engine_bp | - | app.py | yes |
| company_metrics_bp | - | app.py | yes |
| retention_engine_bp | - | app.py | yes |
| distribution_bp | - | app.py | yes |
| deployment_discipline_bp | - | app.py | yes |
| internal_operations_bp | - | app.py | yes |
| maintainability_bp | - | app.py | yes |
| scaling_bp | - | app.py | yes |
| observability_bp | - | app.py | yes |
| data_governance_bp | - | app.py | yes |
| devops_assistant_bp | - | app.py | yes |
| cost_management_bp | - | app.py | yes |
| focus_engine_bp | - | app.py | yes |
| security_maturity_bp | - | app.py | yes |
| platform_trust_bp | - | app.py | yes |
| payments_bp | - | app.py | yes |
| server_bp | - | app.py | yes |
| admin_bp | - | app.py | yes |
| branches_bp | - | app.py | yes |
| admin | /admin | modules/admin/routes.py | declared |
| agents | /admin/agents | modules/agents/routes.py | declared |
| branches | /admin | modules/branches/routes.py | declared |
| communication | /api/communication | modules/communication/routes.py | declared |
| dashboard | / | modules/dashboard/routes.py | declared |
| notifications | /api/notifications | modules/notifications/routes.py | declared |
| offline | /api/offline | modules/offline/routes.py | declared |
| realtime | /api/realtime | modules/realtime/routes.py | declared |
| server | /server | modules/server/routes.py | declared |

```

Route Distribution By Module

```

| Module | Route count |
| --- | --- |

```

admin 21
sales 16
auth 13
inventory 12
analytics 11
app 11
cloud 10
receipts 9
agents 8
payments 8
barcode 7
finance 7
restock 7
cashiers 6
ai 5
backup 5
customers 4
reports 4
recommendations 3
alerts 2
dashboard 2
release_notes 2
server 2
branches 1

Route Sensitivity Distribution

Sensitivity Route count
--- ---
high 54
medium 37
normal 85

Auth Hint Distribution

Auth hint Route count
--- ---
admin 67
authenticated 39
public 3
server_owner 44
unknown 23

Module Dependency Map

```

'''mermaid
graph LR
    admin[admin] --> backup[backup]
    admin[admin] --> database[database]
    admin[admin] --> operations[operations]
    admin[admin] --> payments[payments]
    agents[agents] --> ai[ai]
    agents[agents] --> background_tasks[background_tasks]
    agents[agents] --> database[database]
    ai[ai] --> analytics[analytics]
    ai[ai] --> database[database]
    ai[ai] --> notifications[notifications]
    ai[ai] --> self_healing[self_healing]
    alerts[alerts] --> database[database]
    analytics[analytics] --> branches[branches]
    analytics[analytics] --> database[database]
    analytics[analytics] --> finance[finance]
    analytics[analytics] --> operations_center[operations_center]
    api[api] --> analytics[analytics]
    api[api] --> database[database]
    api[api] --> integrations[integrations]
    api[api] --> performance[performance]
    api[api] --> security[security]
    auth[auth] --> admin[admin]
    auth[auth] --> branches[branches]
```

auth[auth] -> constants[constants]
 auth[auth] -> database[database]
 auth[auth] -> security[security]
 background_tasks[background_tasks] -> agents[agents]
 background_tasks[background_tasks] -> ai[ai]
 background_tasks[background_tasks] -> backup[backup]
 background_tasks[background_tasks] -> database[database]
 background_tasks[background_tasks] -> disaster_recovery[disaster_recovery]
 background_tasks[background_tasks] -> notifications[notifications]
 background_tasks[background_tasks] -> recommendations[recommendations]
 background_tasks[background_tasks] -> sales[sales]
 backup[backup] -> database[database]
 backup[backup] -> persistence[persistence]
 backup[backup] -> self_healing[self_healing]
 barcode[barcode] -> database[database]
 billing[billing] -> database[database]
 branches[branches] -> database[database]
 brand_experience[brand_experience] -> business_reliability[business_reliability]
 brand_experience[brand_experience] -> system_health[system_health]
 brand_experience[brand_experience] -> trust[trust]
 business_activity[business_activity] -> database[database]
 business_reliability[business_reliability] -> database[database]
 business_retention[business_retention] -> database[database]
 business_retention[business_retention] -> notifications[notifications]
 cashiers[cashiers] -> database[database]
 cashiers[cashiers] -> storage[storage]
 cloud[cloud] -> backup[backup]
 cloud[cloud] -> database[database]
 cloud[cloud] -> persistence[persistence]
 cloud[cloud] -> release_notes[release_notes]
 communication[communication] -> database[database]
 communication[communication] -> notifications[notifications]
 communication[communication] -> realtime[realtime]
 company_metrics[company_metrics] -> database[database]
 company_operations[company_operations] -> customer_success[customer_success]
 company_operations[company_operations] -> database[database]
 company_operations[company_operations] -> market_validation[market_validation]
 company_operations[company_operations] -> pilot_program[pilot_program]
 company_operations[company_operations] -> product_intelligence[product_intelligence]
 cost_management[cost_management] -> database[database]
 cost_management[cost_management] -> persistence[persistence]
 customer_intelligence[customer_intelligence] -> database[database]
 customer_success[customer_success] -> database[database]
 customers[customers] -> database[database]
 dashboard[dashboard] -> admin[admin]
 dashboard[dashboard] -> ai[ai]
 dashboard[dashboard] -> database[database]
 dashboard[dashboard] -> self_healing[self_healing]
 data_governance[data_governance] -> database[database]
 database.py[database.py] -> persistence[persistence]
 decolorators[decolorators] -> auth[auth]
 demo_system[demo_system] -> branches[branches]
 demo_system[demo_system] -> database[database]
 demo_system[demo_system] -> operations_mode[operations_mode]
 deployment_discipline[deployment_discipline] -> database[database]
 deployment_discipline[deployment_discipline] -> system_health[system_health]
 devops_assistant[devops_assistant] -> database[database]
 devops_assistant[devops_assistant] -> system_health[system_health]
 disaster_recovery.py[disaster_recovery.py] -> backup[backup]
 disaster_recovery.py[disaster_recovery.py] -> database[database]
 disaster_recovery.py[disaster_recovery.py] -> persistence[persistence]
 distribution[distribution] -> database[database]
 enterprise_branches[enterprise_branches] -> branches[branches]
 enterprise_branches[enterprise_branches] -> database[database]
 enterprise_branches[enterprise_branches] -> realtime[realtime]
 finance[finance] -> database[database]
 focus_engine[focus_engine] -> database[database]
 growth[growth] -> database[database]
 growth_engine[growth_engine] -> database[database]
 integrations[integrations] -> database[database]
 internal_operations[internal_operations] -> database[database]
 inventory[inventory] -> ai[ai]
 inventory[inventory] -> backup[backup]
 inventory[inventory] -> branches[branches]
 inventory[inventory] -> database[database]
 inventory[inventory] -> finance[finance]

inventory[inventory] --> persistence[persistence]
 maintainability[maintainability] --> database[database]
 market_validation[market_validation] --> database[database]
 marketplace[marketplace] --> database[database]
 models.py[models.py] --> extensions[extensions]
 notifications[notifications] --> database[database]
 observability[observability] --> database[database]
 offline[offline] --> database[database]
 offline[offline] --> sales[sales]
 onboarding[onboarding] --> branches[branches]
 onboarding[onboarding] --> database[database]
 onboarding[onboarding] --> notifications[notifications]
 operations.py[operations.py] --> database[database]
 operations.py[operations.py] --> persistence[persistence]
 operations.py[operations.py] --> system_health[system_health]
 operations_center[operations_center] --> ai[ai]
 operations_center[operations_center] --> database[database]
 operations_center[operations_center] --> notifications[notifications]
 operations_center[operations_center] --> operations[operations]
 operations_center[operations_center] --> realtime[realtime]
 operations_center[operations_center] --> system_health[system_health]
 operations_docs[operations_docs]
 operations_mode[operations_mode] --> branches[branches]
 operations_mode[operations_mode] --> database[database]
 operations_mode[operations_mode] --> operations[operations]
 operations_mode[operations_mode] --> system_health[system_health]
 payments[payments] --> ai[ai]
 payments[payments] --> alerts[alerts]
 payments[payments] --> branches[branches]
 payments[payments] --> constants[constants]
 payments[payments] --> database[database]
 payments[payments] --> sales[sales]
 performance.py[performance.py] --> database[database]
 pilot_program[pilot_program] --> database[database]
 platform_trust[platform_trust] --> business_reliability[business_reliability]
 platform_trust[platform_trust] --> database[database]
 platform_trust[platform_trust] --> observability[observability]
 platform_trust[platform_trust] --> system_health[system_health]
 playbooks[playbooks]
 procurement[procurement] --> database[database]
 procurement[procurement] --> notifications[notifications]
 procurement[procurement] --> restock[restock]
 product_analytics[product_analytics] --> database[database]
 product_feedback[product_feedback] --> database[database]
 product_intelligence[product_intelligence] --> database[database]
 realtime[realtime] --> database[database]
 receipts[receipts] --> database[database]
 receipts[receipts] --> payments[payments]
 recommendations[recommendations] --> analytics[analytics]
 recommendations[recommendations] --> background_tasks[background_tasks]
 recommendations[recommendations] --> database[database]
 recommendations[recommendations] --> security[security]
 release_notes[release_notes] --> cloud[cloud]
 release_notes[release_notes] --> database[database]
 reports[reports] --> ai[ai]
 reports[reports] --> database[database]
 restock[restock] --> database[database]
 retention_engine[retention_engine] --> communication[communication]
 retention_engine[retention_engine] --> database[database]
 retention_engine[retention_engine] --> notifications[notifications]
 sales[sales] --> ai[ai]
 sales[sales] --> alerts[alerts]
 sales[sales] --> branches[branches]
 sales[sales] --> constants[constants]
 sales[sales] --> database[database]
 sales[sales] --> finance[finance]
 sales[sales] --> payments[payments]
 sales[sales] --> receipts[receipts]
 scaling[scaling] --> database[database]
 scaling[scaling] --> operations[operations]
 scaling[scaling] --> persistence[persistence]
 security[security] --> branches[branches]
 security[security] --> database[database]
 security_maturity[security_maturity] --> database[database]
 security_maturity[security_maturity] --> security[security]
 self_healing[self_healing] --> ai[ai]

```

self_healing[self_healing] --> backup[backup]
self_healing[self_healing] --> database[database]
self_healing[self_healing] --> persistence[persistence]
server[server] --> ai[ai]
server[server] --> background_tasks[background_tasks]
server[server] --> cloud[cloud]
server[server] --> database[database]
server[server] --> persistence[persistence]
server[server] --> security[security]
server[server] --> self_healing[self_healing]
server[server] --> system_health[system_health]
storage[storage] --> persistence[persistence]
storage.py[storage.py] --> persistence[persistence]
support[support] --> database[database]
support[support] --> system_health[system_health]
system_health.py[system_health.py] --> background_tasks[background_tasks]
system_health.py[system_health.py] --> database[database]
system_health.py[system_health.py] --> persistence[persistence]
trust[trust] --> database[database]
trust[trust] --> notifications[notifications]
trust[trust] --> system_health[system_health]
trust_engine[trust_engine] --> business_reliability[business_reliability]
trust_engine[trust_engine] --> database[database]
trust_engine[trust_engine] --> system_health[system_health]
trust_engine[trust_engine] --> trust[trust]
validation[validation] --> backup[backup]
validation[validation] --> database[database]
validation[validation] --> persistence[persistence]
validation[validation] --> security[security]
workflows[workflows] --> database[database]
workflows[workflows] --> notifications[notifications]
...

```

Route Architecture

```

...mermaid
flowchart TB
    user[User / Admin / Cashier] --> flask[Flask App]
    flask --> admin[admin: 21 routes]
    flask --> agents[agents: 8 routes]
    flask --> ai[ai: 5 routes]
    flask --> alerts[alerts: 2 routes]
    flask --> analytics[analytics: 11 routes]
    flask --> app[app: 11 routes]
    flask --> auth[auth: 13 routes]
    flask --> backup[backup: 5 routes]
    flask --> barcode[barcode: 7 routes]
    flask --> branches[branches: 1 routes]
    flask --> cashiers[cashiers: 6 routes]
    flask --> cloud[cloud: 10 routes]
    flask --> customers[customers: 4 routes]
    flask --> dashboard[dashboard: 2 routes]
    flask --> finance[finance: 7 routes]
    flask --> inventory[inventory: 12 routes]
    flask --> payments[payments: 8 routes]
    flask --> receipts[receipts: 9 routes]
    flask --> recommendations[recommendations: 3 routes]
    flask --> release_notes[release_notes: 2 routes]
    flask --> reports[reports: 4 routes]
    flask --> restock[restock: 7 routes]
    flask --> sales[sales: 16 routes]
    flask --> server[server: 2 routes]
...

```

Modules

```

| Module | Outgoing dependencies | Depends on |
| --- | --- | --- |
| admin | 4 | backup, database, operations, payments |
| agents | 3 | ai, background_tasks, database |
| ai | 4 | analytics, database, notifications, self_healing |
| alerts | 1 | database |
| analytics | 4 | branches, database, finance, operations_center |
| api | 5 | analytics, database, integrations, performance, security |

```

auth	5	admin, branches, constants, database, security
background_tasks	8	agents, ai, backup, database, disaster_recovery, notifications, recommendations, sales
backup	3	database, persistence, self_healing
barcode	1	database
billing	1	database
branches	1	database
brand_experience	3	business_reliability, system_health, trust
business_activity	1	database
business_reliability	1	database
business_retention	2	database, notifications
cashiers	2	database, storage
cloud	4	backup, database, persistence, release_notes
communication	3	database, notifications, realtime
company_metrics	1	database
company_operations	5	customer_success, database, market_validation, pilot_program, product_intelligence
cost_management	2	database, persistence
customer_intelligence	1	database
customer_success	1	database
customers	1	database
dashboard	4	admin, ai, database, self_healing
data_governance	1	database
decolorators	1	auth
demo_system	3	branches, database, operations_mode
deployment_discipline	2	database, system_health
devops_assistant	2	database, system_health
distribution	1	database
enterprise_branches	3	branches, database, realtime
finance	1	database
focus_engine	1	database
growth	1	database
growth_engine	1	database
integrations	1	database
internal_operations	1	database
inventory	6	ai, backup, branches, database, finance, persistence
maintainability	1	database
market_validation	1	database
marketplace	1	database
notifications	1	database
observability	1	database
offline	2	database, sales
onboarding	3	branches, database, notifications
operations_center	6	ai, database, notifications, operations, realtime, system_health
operations_docs	0	-
operations_mode	4	branches, database, operations, system_health
payments	6	ai, alerts, branches, constants, database, sales
pilot_program	1	database
platform_trust	4	business_reliability, database, observability, system_health
playbooks	0	-
procurement	3	database, notifications, restock
product_analytics	1	database
product_feedback	1	database
product_intelligence	1	database
realtime	1	database
receipts	2	database, payments
recommendations	4	analytics, background_tasks, database, security
release_notes	2	cloud, database
reports	2	ai, database
restock	1	database
retention_engine	3	communication, database, notifications
sales	8	ai, alerts, branches, constants, database, finance, payments, receipts
scaling	3	database, operations, persistence
security	2	branches, database
security_maturity	2	database, security
self_healing	4	ai, backup, database, persistence
server	8	ai, background_tasks, cloud, database, persistence, security, self_healing, system_health
storage	1	persistence

support	2	database, system_health
trust	3	database, notifications, system_health
trust_engine	4	business_reliability, database, system_health, trust
validation	4	backup, database, persistence, security
workflows	2	database, notifications

Coupling Pressure Report

Module	Outgoing	Incoming	Representative dependencies
ai	4	10	analytics, database, notifications, self_healing
background_tasks	8	4	agents, ai, backup, database, disaster_recovery, notifications, recommendations, sales
branches	1	10	database
notifications	1	10	database
sales	8	3	ai, alerts, branches, constants, database, finance, payments, receipts
backup	3	7	database, persistence, self_healing
payments	6	3	ai, alerts, branches, constants, database, sales
security	2	6	branches, database
self_healing	4	4	ai, backup, database, persistence
server	8	0	ai, background_tasks, cloud, database, persistence, security, self_healing, system_health
analytics	4	3	branches, database, finance, operations_center
operations_center	6	1	ai, database, notifications, operations, realtime, system_health
admin	4	2	backup, database, operations, payments
auth	5	1	admin, branches, constants, database, security
cloud	4	2	backup, database, persistence, release_notes
inventory	6	0	ai, backup, branches, database, finance, persistence
api	5	0	analytics, database, integrations, performance, security
company_operations	5	0	customer_success, database, market_validation, pilot_program, product_intelligence
operations_mode	4	1	branches, database, operations, system_health
recommendations	4	1	analytics, background_tasks, database, security

Circular Dependency Detection

Cycle
ai -> analytics -> operations_center -> ai
self_healing -> ai -> self_healing
backup -> self_healing -> backup
payments -> sales -> payments
payments -> sales -> receipts -> payments
agents -> background_tasks -> agents
background_tasks -> recommendations -> background_tasks
cloud -> release_notes -> cloud

Orphan Module Detection

No records discovered.

Service Communication Map

- Flask routes call module route handlers and service helpers inside `modules/`.
- Payment workflows communicate with provider-specific modules while generated docs intentionally avoid credential details.
- Background work is coordinated through the database-backed task queue and governance agent runners.
- Documentation and governance outputs are written to `docs/`, `branding/`, and selected root-level evidence files.

Route Catalog

Route	Methods	Module	Endpoint	Auth hint
`/admin/add-cashier`	POST	admin	`admin\_add\_cashier`	admin
`/admin/announce-cashiers`	POST	admin	`announce\_cashiers`	authenticated
`/admin/app-billing`	GET	admin	`app\_billing`	server_owner
`/admin/app-billing/exemptions`	POST	admin	`app\_billing\_exemptions\_save`	server_owner
`/admin/app-billing/methods`	POST	admin	`app\_billing\_methods\_save`	server_owner
`/admin/app-billing/pay`	GET	admin	`app\_billing\_pay`	authenticated
`/admin/app-billing/pay`	POST	admin	`app\_billing\_pay\_submit`	authenticated
`/admin/app-billing/payments/<int:payment\_id>/status`	POST	admin	`app\_billing\_payment\_status`	server_owner
`/admin/app-billing/settings`	POST	admin	`app\_billing\_settings`	server_owner
`/admin/app-billing/tiers`	POST	admin	`app\_billing\_tier\_add`	server_owner

`/admin/app-billing/tiers/<int:tier\_id>/delete`	POST	admin	`app\_billing\_tier\_delete`	server_owner
`/admin/brand`	POST	admin	`admin\_brand\_update`	authenticated
`/admin/calendar`	GET, POST	admin	`calendar\_view`	authenticated
`/admin/calendar/delete`	POST	admin	`calendar\_delete`	authenticated
`/admin/plugins`	GET	admin	`plugins`	server_owner
`/admin/plugins/register`	POST	admin	`register\_plugin`	server_owner
`/admin/plugins/toggle`	POST	admin	`toggle\_plugin`	server_owner
`/admin/sales/cleanup`	POST	admin	`cleanup\_sales`	authenticated
`/admin/system-operations`	GET	admin	`system\_operations`	unknown
`/admin/tutorial-videos`	GET	admin	`tutorial\_videos\_admin`	server_owner
`/admin/tutorial-videos/post`	POST	admin	`tutorial\_videos\_post`	server_owner
`/admin/agents/<agent\_name>/queue`	POST	agents	`queue\_agent`	unknown
`/admin/agents/api`	GET	agents	`api\_explorer`	unknown
`/admin/agents/architecture`	GET	agents	`architecture\_explorer`	unknown
`/admin/agents/deployment`	GET	agents	`deployment\_audits`	unknown
`/admin/agents/queue`	POST	agents	`queue\_orchestrator`	unknown
`/admin/agents/releases`	GET	agents	`release\_explorer`	unknown
`/admin/agents/run-now`	POST	agents	`run\_now`	unknown
`/admin/agents/security`	GET	agents	`security\_explorer`	unknown
`/ai`	GET	ai	`ai\_dashboard`	admin
`/ai-csv-agent`	GET, POST	ai	`ai\_csv\_agent`	admin
`/ai-csv-agent/download`	GET	ai	`ai\_csv\_download`	admin
`/ai-help`	GET	ai	`ai\_help`	server_owner
`/api/ai-help/update-guide`	POST	ai	`ai\_help\_update\_guide`	server_owner
`/alerts`	GET	alerts	`alerts`	admin
`/api/alerts/fraud-unread-count`	GET	alerts	`fraud\_unread\_count`	admin
`/analytics`	GET	analytics	`analytics`	admin
`/analytics/ai-insights`	GET	analytics	`ai\_insights`	admin
`/analytics/branches`	GET	analytics	`branches\_analytics`	admin
`/analytics/funds`	GET	analytics	`fund\_analysis`	admin
`/analytics/profit-loss`	GET	analytics	`profit\_loss`	admin
`/api/analytics/ai-agent`	POST	analytics	`analytics\_ai\_agent`	admin
`/api/analytics/branches/ai`	POST	analytics	`branches\_ai\_api`	admin
`/api/analytics/branches/overview`	GET	analytics	`branches\_overview\_api`	admin
`/api/analytics/compare`	POST	analytics	`compare\_analytics`	admin
`/api/product-performance/<period>`	GET	analytics	`product\_performance\_api`	admin
`/api/sales-chart/<period>`	GET	analytics	`sales\_chart\_api`	admin
`/admin/shops`	GET	app	`admin\_shops`	server_owner
`/admin/shops/<int:shop\_id>`	GET, POST	app	`admin\_shop\_detail`	server_owner
`/admin/shops/<int:shop\_id>/delete`	POST	app	`delete\_admin\_shop`	server_owner
`/app-entry-qr.svg`	GET	app	`app\_entry\_qr`	unknown
`/app\_guide`	GET	app	`app\_guide`	authenticated
`/documentation`	GET	app	`view\_documentation`	unknown
`/documentation/update`	POST	app	`refresh\_documentation`	unknown
`/healthz`	GET	app	`healthz`	unknown
`/help-center`	GET, POST	app	`help\_center`	authenticated
`/readiness`	GET	app	`readiness`	unknown
`/service-worker.js`	GET	app	`service\_worker`	unknown
`/`	GET	auth	`welcome`	public
`/admin/edit`	GET, POST	auth	`edit\_admin`	admin
`/change-password`	GET, POST	auth	`change\_password\_main`	server_owner
`/forgot-password`	GET, POST	auth	`forgot\_password`	authenticated
`/free\_server\_entry`	POST	auth	`free\_server\_entry\_deprecated\_1`	server_owner
`/login`	GET, POST	auth	`login`	admin
`/logout`	GET	auth	`logout\_route`	authenticated
`/register`	GET, POST	auth	`register`	admin
`/register-admin`	GET, POST	auth	`register\_admin`	unknown
`/register/verify`	GET, POST	auth	`register\_verify`	authenticated
`/register/verify/resend`	POST	auth	`register\_resend`	unknown
`/terms`	GET	auth	`terms`	public
`/welcome`	GET	auth	`welcome\_details`	public
`/backup`	GET	backup	`backup`	server_owner
`/backup/create`	POST	backup	`create`	server_owner
`/backup/download/<filename>`	GET	backup	`download`	server_owner
`/backup/restore/<filename>`	POST	backup	`restore`	server_owner
`/backup/validate/<filename>`	POST	backup	`validate`	server_owner

`/api/phone-scanner/<token>/next`	GET	barcode	`next\_phone\_scan`	authenticated
`/api/phone-scanner/<token>/scan`	POST	barcode	`receive\_phone\_scan`	authenticated
`/connect-phone-scanner`	GET	barcode	`connect\_phone\_scanner`	authenticated
`/mobile-scan`	GET	barcode	`mobile\_scan`	authenticated
`/phone-scanner/<token>`	GET	barcode	`phone\_scanner`	authenticated
`/scan`	GET, POST	barcode	`scan`	authenticated
`/scanner-center`	GET	barcode	`scanner\_center`	authenticated
`/admin/branches`	GET, POST	branches	`manage\_branches`	admin
`/cashier\_tutorial\_videos`	GET	cashiers	`cashier\_tutorial\_videos`	admin
`/cashiers`	GET, POST	cashiers	`cashiers`	admin
`/cashiers/<int:cashier\_id>/edit`	GET, POST	cashiers	`edit\_cashier`	admin
`/profile`	GET, POST	cashiers	`profile`	authenticated
`/set-language`	POST	cashiers	`set\_language`	admin
`/uploads/certifications/<filename>`	GET	cashiers	`serve\_certification`	admin
`/cloud`	GET	cloud	`cloud`	server_owner
`/cloud/apply-update/<filename>`	POST	cloud	`apply\_update`	server_owner
`/cloud/create-update`	POST	cloud	`create\_update`	server_owner
`/cloud/download-backup/<filename>`	GET	cloud	`download\_cloud\_backup`	server_owner
`/cloud/download-export/<filename>`	GET	cloud	`download\_user\_export`	admin
`/cloud/export-all-user-data`	POST	cloud	`export\_all\_user\_data`	server_owner
`/cloud/export-user-data`	POST	cloud	`export\_user\_data`	admin
`/cloud/restore/<filename>`	POST	cloud	`restore`	server_owner
`/cloud/updates`	GET	cloud	`list\_updates`	server_owner
`/cloud/upload`	POST	cloud	`upload`	server_owner
`/add-credit/<int:id>`	POST	customers	`add\_credit`	admin
`/add-customer`	GET, POST	customers	`add\_customer`	admin
`/add-points/<int:id>/<int:points>`	POST	customers	`add\_points`	admin
`/customers`	GET	customers	`customers`	admin
`/admin`	GET	dashboard	`admin`	server_owner
`/dashboard`	GET	dashboard	`dashboard`	server_owner
`/add-expense`	GET, POST	finance	`add\_expense`	admin
`/add-loan`	POST	finance	`add\_loan`	admin
`/allocate-fund`	POST	finance	`allocate\_fund`	admin
`/expenses`	GET	finance	`expenses`	admin
`/expenses/<int:expense\_id>/delete`	POST	finance	`delete\_expense`	admin
`/finance`	GET	finance	`finance`	admin
`/finance/cashflow/<fund\_source>`	GET	finance	`view\_cashflow`	admin
`/add-product`	GET, POST	inventory	`add\_product`	admin
`/add-product-scan`	GET	inventory	`add\_product\_scan`	admin
`/add-service`	GET, POST	inventory	`add\_service`	admin
`/bulk-import-products`	GET, POST	inventory	`bulk\_import\_products`	server_owner
`/bulk-import-products/jobs/<int:job\_id>`	GET	inventory	`bulk\_import\_job\_status`	server_owner
`/bulk-import-products/jobs/<int:job\_id>/process`	POST	inventory	`bulk\_import\_job\_process`	server_owner
`/bulk-import-products/jobs/<int:job\_id>/status`	GET	inventory	`bulk\_import\_job\_status\_json`	server_owner
`/delete/<int:id>`	POST	inventory	`delete\_product`	admin
`/inventory`	GET	inventory	`inventory`	admin
`/search-inventory`	GET	inventory	`search\_inventory`	authenticated
`/update-stock/<int:id>`	POST	inventory	`update\_stock`	admin
`/voice-search-product`	POST	inventory	`voice\_search\_product`	authenticated
`/api/payment-methods`	GET	payments	`api\_payment\_methods`	authenticated
`/checkout-methods`	GET	payments	`checkout\_methods`	authenticated
`/mpesa/b2c/result`	POST	payments	`mpesa\_b2c\_result`	unknown
`/mpesa/b2c/timeout`	POST	payments	`mpesa\_b2c\_timeout`	unknown
`/mpesa/callback`	POST	payments	`mpesa\_stk\_callback`	unknown
`/payment-methods`	GET	payments	`payment\_methods`	admin
`/payment-methods/save`	POST	payments	`save\_payment\_method`	admin
`/process-payment/<provider\_code>`	POST	payments	`process\_payment`	admin
`/admin/receipt-delivery`	GET, POST	receipts	`receipt\_delivery\_settings`	admin
`/api/payment-status/<int:sale\_id>`	GET	receipts	`api\_payment\_status`	authenticated
`/payment-status/<int:sale\_id>`	GET	receipts	`payment\_status\_page`	admin
`/payment-status/<int:sale\_id>/confirm`	POST	receipts	`verify\_payment`	admin
`/payment-status/<int:sale\_id>/refresh`	POST	receipts	`refresh\_payment\_status`	authenticated
`/payment-verify/<int:sale\_id>`	POST	receipts	`verify\_payment`	admin
`/receipt/<int:sale\_id>/send`	POST	receipts	`send\_receipt`	authenticated
`/receipts`	GET	receipts	`receipts`	authenticated
`/receipts/<int:sale\_id>`	GET	receipts	`receipt\_detail`	authenticated

```

| `/api/recommendations` | GET | recommendations | `recommendations_api` | authenticated |
| `/api/recommendations/refresh` | POST | recommendations | `refresh_recommendations_api` | authenticated |
| `/recommendations` | GET | recommendations | `recommendations_page` | authenticated |
| `/admin/release-notes` | GET, POST | release_notes | `admin_release_notes` | server_owner |
| `/release-notes` | GET | release_notes | `release_notes` | server_owner |
| `/admin/user-reports` | GET, POST | reports | `admin_user_reports` | server_owner |
| `/admin/user-reports/<int:report_id>/mark-read` | POST | reports | `update_report` | server_owner |
| `/admin/user-reports/<int:report_id>/reply` | POST | reports | `update_report` | server_owner |
| `/reports` | GET | reports | `reports` | admin |
| `/restock` | GET | restock | `restock_dashboard` | authenticated |
| `/restock/generate` | POST | restock | `generate_restock_request` | authenticated |
| `/restock/request/<int:request_id>` | GET, POST | restock | `restock_request_detail` | authenticated |
| `/restock/request/<int:request_id>/download` | GET | restock | `download_restock_request` | authenticated |
| `/restock/request/<int:request_id>/notify-admins` | POST | restock | `notify_admins` | authenticated |
| `/restock/supplier/<token>` | GET, POST | restock | `supplier_review` | unknown |
| `/restock/suppliers` | GET, POST | restock | `restock_suppliers` | authenticated |
| `/api/cart` | GET | sales | `api_cart_get` | admin |
| `/api/cart/add` | POST | sales | `api_cart_add` | admin |
| `/api/cart/clear` | POST | sales | `api_cart_clear` | admin |
| `/api/cart/price` | POST | sales | `api_cart_price` | admin |
| `/api/cart/remove/<int:product_id>` | POST | sales | `api_cart_remove` | admin |
| `/api/cart/update` | POST | sales | `api_cart_update` | admin |
| `/api/customers/search` | GET | sales | `api_customers_search` | admin |
| `/checkout` | GET | sales | `checkout` | authenticated |
| `/process-payment/cash` | GET | sales | `cash_payment` | unknown |
| `/receipt/<int:sale_id>` | GET | sales | `receipt` | admin |
| `/return-goods` | GET, POST | sales | `return_goods` | admin |
| `/sales` | GET, POST | sales | `sales` | admin |
| `/search-product` | GET | sales | `search_product` | admin |
| `/set-currency` | POST | sales | `set_currency` | admin |
| `/transactions` | GET | sales | `transactions` | admin |
| `/voice-add-to-cart` | POST | sales | `voice_add_to_cart` | admin |
| `/server/dashboard` | GET | server | `server_dashboard` | unknown |
| `/server/shops` | GET | server | `server_shops` | server_owner |

```

Scaling Bottleneck Watchlist

- High route-count modules should be monitored for route-handler growth and split into service layers where needed.
- Modules with many incoming dependencies should be treated as shared contracts and changed carefully.
- Backup, documentation, deployment, and governance work should remain outside latency-sensitive request paths.
- Payment and billing routes should stay idempotent and auditable.

Architecture Guardrails

- Preserve Flask blueprint boundaries.
- Keep database compatibility adapters PostgreSQL-safe and SQLite-safe.
- Keep generated documents outside source-hash loops where possible.
- Keep enterprise governance features modular under `modules/agents/`.

Drift And Risk Notes

- Circular dependencies should stay at zero or be explicitly reviewed.
- Modules with very high dependency counts should be watched for unstable coupling.
- Generated docs are intentionally separated from source hashing to prevent regeneration loops.
- This report is static-analysis based; runtime behavior should be validated through smoke tests and readiness checks.

Enterprise Completeness Appendix

Record Scope

This record is maintained by the Architecture Intelligence Agent. Its scope is: module dependency maps, blueprint relationships, service communication maps, route topology, drift detection, and scaling watchlists

Generated Outputs Covered

```

| Output |
| --- |
| `docs/architecture/ARCHITECTURE_REPORT.md` |
| `docs/architecture/module_dependencies.mmd` |

```

```
| `docs/architecture/route_topology.mmd` |  
| `docs/architecture/system_topology.puml` |  
| `docs/architecture/topology.json` |
```

Completion Checklist

```
| Requirement | Status |  
| --- | --- |  
| Professional markdown structure | Included |  
| Evidence-oriented summaries | Included |  
| Safety boundaries | Included |  
| Operational review notes | Included |  
| Generated backup before overwrite | Handled by agent writer |  
| No secrets or credentials | Required by generator policy |  
| Solo-founder maintainability | Prioritized |
```

Maintenance Rule

- Regenerate this record after feature, route, database, deployment, branding, payment, security, or governance changes.
- Review the generated result before using it externally.
- Commit the record with release milestones when it is part of release evidence.
- Keep archived versions as historical evidence, not as the primary current source.

Safety Boundary

- Secrets, API keys, provider credentials, passwords, customer data, and environment variable values are never exported.
- Generated files are backed up before overwrite.
- Hash comparison and cooldowns reduce unnecessary regeneration.
- Heavy analysis runs through explicit agent execution or background queues, not normal request rendering.

docs/architecture/module_dependencies.mmd

flowchart LR

```
admin[admin] --> backup[backup]  
admin[admin] --> database[database]  
admin[admin] --> operations[operations]  
admin[admin] --> payments[payments]  
agents[agents] --> ai[ai]  
agents[agents] --> background_tasks[background_tasks]  
agents[agents] --> database[database]  
ai[ai] --> analytics[analytics]  
ai[ai] --> database[database]  
ai[ai] --> notifications[notifications]  
ai[ai] --> self_healing[self_healing]  
alerts[alerts] --> database[database]  
analytics[analytics] --> branches[branches]  
analytics[analytics] --> database[database]  
analytics[analytics] --> finance[finance]  
analytics[analytics] --> operations_center[operations_center]  
api[api] --> analytics[analytics]  
api[api] --> database[database]  
api[api] --> integrations[integrations]  
api[api] --> performance[performance]  
api[api] --> security[security]  
auth[auth] --> admin[admin]  
auth[auth] --> branches[branches]  
auth[auth] --> constants[constants]  
auth[auth] --> database[database]  
auth[auth] --> security[security]  
background_tasks[background_tasks] --> agents[agents]  
background_tasks[background_tasks] --> ai[ai]  
background_tasks[background_tasks] --> backup[backup]  
background_tasks[background_tasks] --> database[database]  
background_tasks[background_tasks] --> disaster_recovery[disaster_recovery]  
background_tasks[background_tasks] --> notifications[notifications]  
background_tasks[background_tasks] --> recommendations[recommendations]  
background_tasks[background_tasks] --> sales[sales]
```

backup[backup] --> database[database]
 backup[backup] --> persistence[persistence]
 backup[backup] --> self_healing[self_healing]
 barcode[barcode] --> database[database]
 billing[billing] --> database[database]
 branches[branches] --> database[database]
 brand_experience[brand_experience] --> business_reliability[business_reliability]
 brand_experience[brand_experience] --> system_health[system_health]
 brand_experience[brand_experience] --> trust[trust]
 business_activity[business_activity] --> database[database]
 business_reliability[business_reliability] --> database[database]
 business_retention[business_retention] --> database[database]
 business_retention[business_retention] --> notifications[notifications]
 cashiers[cashiers] --> database[database]
 cashiers[cashiers] --> storage[storage]
 cloud[cloud] --> backup[backup]
 cloud[cloud] --> database[database]
 cloud[cloud] --> persistence[persistence]
 cloud[cloud] --> release_notes[release_notes]
 communication[communication] --> database[database]
 communication[communication] --> notifications[notifications]
 communication[communication] --> realtime[realtime]
 company_metrics[company_metrics] --> database[database]
 company_operations[company_operations] --> customer_success[customer_success]
 company_operations[company_operations] --> database[database]
 company_operations[company_operations] --> market_validation[market_validation]
 company_operations[company_operations] --> pilot_program[pilot_program]
 company_operations[company_operations] --> product_intelligence[product_intelligence]
 cost_management[cost_management] --> database[database]
 cost_management[cost_management] --> persistence[persistence]
 customer_intelligence[customer_intelligence] --> database[database]
 customer_success[customer_success] --> database[database]
 customers[customers] --> database[database]
 dashboard[dashboard] --> admin[admin]
 dashboard[dashboard] --> ai[ai]
 dashboard[dashboard] --> database[database]
 dashboard[dashboard] --> self_healing[self_healing]
 data_governance[data_governance] --> database[database]
 database.py[database.py] --> persistence[persistence]
 decolators[decolators] --> auth[auth]
 demo_system[demo_system] --> branches[branches]
 demo_system[demo_system] --> database[database]
 demo_system[demo_system] --> operations_mode[operations_mode]
 deployment_discipline[deployment_discipline] --> database[database]
 deployment_discipline[deployment_discipline] --> system_health[system_health]
 devops_assistant[devops_assistant] --> database[database]
 devops_assistant[devops_assistant] --> system_health[system_health]
 disaster_recovery.py[disaster_recovery.py] --> backup[backup]
 disaster_recovery.py[disaster_recovery.py] --> database[database]
 disaster_recovery.py[disaster_recovery.py] --> persistence[persistence]
 distribution[distribution] --> database[database]
 enterprise_branches[enterprise_branches] --> branches[branches]
 enterprise_branches[enterprise_branches] --> database[database]
 enterprise_branches[enterprise_branches] --> realtime[realtime]
 finance[finance] --> database[database]
 focus_engine[focus_engine] --> database[database]
 growth[growth] --> database[database]
 growth_engine[growth_engine] --> database[database]
 integrations[integrations] --> database[database]
 internal_operations[internal_operations] --> database[database]
 inventory[inventory] --> ai[ai]
 inventory[inventory] --> backup[backup]
 inventory[inventory] --> branches[branches]
 inventory[inventory] --> database[database]
 inventory[inventory] --> finance[finance]
 inventory[inventory] --> persistence[persistence]

maintainability[maintainability] --> database[database]
 market_validation[market_validation] --> database[database]
 marketplace[marketplace] --> database[database]
 models.py[models.py] --> extensions[extensions]
 notifications[notifications] --> database[database]
 observability[observability] --> database[database]
 offline[offline] --> database[database]
 offline[offline] --> sales[sales]
 onboarding[onboarding] --> branches[branches]
 onboarding[onboarding] --> database[database]
 onboarding[onboarding] --> notifications[notifications]
 operations.py[operations.py] --> database[database]
 operations.py[operations.py] --> persistence[persistence]
 operations.py[operations.py] --> system_health[system_health]
 operations_center[operations_center] --> ai[ai]
 operations_center[operations_center] --> database[database]
 operations_center[operations_center] --> notifications[notifications]
 operations_center[operations_center] --> operations[operations]
 operations_center[operations_center] --> realtime[realtime]
 operations_center[operations_center] --> system_health[system_health]
 operations_docs[operations_docs]
 operations_mode[operations_mode] --> branches[branches]
 operations_mode[operations_mode] --> database[database]
 operations_mode[operations_mode] --> operations[operations]
 operations_mode[operations_mode] --> system_health[system_health]
 payments[payments] --> ai[ai]
 payments[payments] --> alerts[alerts]
 payments[payments] --> branches[branches]
 payments[payments] --> constants[constants]
 payments[payments] --> database[database]
 payments[payments] --> sales[sales]
 performance.py[performance.py] --> database[database]
 pilot_program[pilot_program] --> database[database]
 platform_trust[platform_trust] --> business_reliability[business_reliability]
 platform_trust[platform_trust] --> database[database]
 platform_trust[platform_trust] --> observability[observability]
 platform_trust[platform_trust] --> system_health[system_health]
 playbooks[playbooks]
 procurement[procurement] --> database[database]
 procurement[procurement] --> notifications[notifications]
 procurement[procurement] --> restock[restock]
 product_analytics[product_analytics] --> database[database]
 product_feedback[product_feedback] --> database[database]
 product_intelligence[product_intelligence] --> database[database]
 realtime[realtime] --> database[database]
 receipts[receipts] --> database[database]
 receipts[receipts] --> payments[payments]
 recommendations[recommendations] --> analytics[analytics]
 recommendations[recommendations] --> background_tasks[background_tasks]
 recommendations[recommendations] --> database[database]
 recommendations[recommendations] --> security[security]
 release_notes[release_notes] --> cloud[cloud]
 release_notes[release_notes] --> database[database]
 reports[reports] --> ai[ai]
 reports[reports] --> database[database]
 restock[restock] --> database[database]
 retention_engine[retention_engine] --> communication[communication]
 retention_engine[retention_engine] --> database[database]
 retention_engine[retention_engine] --> notifications[notifications]
 sales[sales] --> ai[ai]
 sales[sales] --> alerts[alerts]
 sales[sales] --> branches[branches]
 sales[sales] --> constants[constants]
 sales[sales] --> database[database]
 sales[sales] --> finance[finance]
 sales[sales] --> payments[payments]

```

sales[sales] --> receipts[receipts]
scaling[scaling] --> database[database]
scaling[scaling] --> operations[operations]
scaling[scaling] --> persistence[persistence]
security[security] --> branches[branches]
security[security] --> database[database]
security_maturity[security_maturity] --> database[database]
security_maturity[security_maturity] --> security[security]
self_healing[self_healing] --> ai[ai]
self_healing[self_healing] --> backup[backup]
self_healing[self_healing] --> database[database]
self_healing[self_healing] --> persistence[persistence]
server[server] --> ai[ai]
server[server] --> background_tasks[background_tasks]
server[server] --> cloud[cloud]
server[server] --> database[database]
server[server] --> persistence[persistence]
server[server] --> security[security]
server[server] --> self_healing[self_healing]
server[server] --> system_health[system_health]
storage[storage] --> persistence[persistence]
storage.py[storage.py] --> persistence[persistence]
support[support] --> database[database]
support[support] --> system_health[system_health]
system_health.py[system_health.py] --> background_tasks[background_tasks]
system_health.py[system_health.py] --> database[database]
system_health.py[system_health.py] --> persistence[persistence]
trust[trust] --> database[database]
trust[trust] --> notifications[notifications]
trust[trust] --> system_health[system_health]
trust_engine[trust_engine] --> business_reliability[business_reliability]
trust_engine[trust_engine] --> database[database]
trust_engine[trust_engine] --> system_health[system_health]
trust_engine[trust_engine] --> trust[trust]
validation[validation] --> backup[backup]
validation[validation] --> database[database]
validation[validation] --> persistence[persistence]
validation[validation] --> security[security]
workflows[workflows] --> database[database]
workflows[workflows] --> notifications[notifications]

```

docs/architecture/route_topology.mmd

flowchart TB

```

user[User / Admin / Cashier] --> flask[Flask App]
flask --> admin[admin: 21 routes]
flask --> agents[agents: 8 routes]
flask --> ai[ai: 5 routes]
flask --> alerts[alerts: 2 routes]
flask --> analytics[analytics: 11 routes]
flask --> app[app: 11 routes]
flask --> auth[auth: 13 routes]
flask --> backup[backup: 5 routes]
flask --> barcode[barcode: 7 routes]
flask --> branches[branches: 1 routes]
flask --> cashiers[cashiers: 6 routes]
flask --> cloud[cloud: 10 routes]
flask --> customers[customers: 4 routes]
flask --> dashboard[dashboard: 2 routes]
flask --> finance[finance: 7 routes]
flask --> inventory[inventory: 12 routes]
flask --> payments[payments: 8 routes]
flask --> receipts[receipts: 9 routes]
flask --> recommendations[recommendations: 3 routes]
flask --> release_notes[release_notes: 2 routes]

```

flask --> reports[reports: 4 routes]
flask --> restock[restock: 7 routes]
flask --> sales[sales: 16 routes]
flask --> server[server: 2 routes]

docs/architecture/system_topology.puml

```
@startuml
skinparam componentStyle rectangle
component Flask
component admin
component agents
component ai
component alerts
component analytics
component api
component auth
component background_tasks
component backup
component barcode
component billing
component branches
component brand_experience
component business_activity
component business_reliability
component business_retention
component cashiers
component cloud
component communication
component company_metrics
component company_operations
component cost_management
component customer_intelligence
component customer_success
component customers
component dashboard
component data_governance
component decolorators
component demo_system
component deployment_discipline
component devops_assistant
component distribution
component enterprise_branches
component finance
component focus_engine
component growth
component growth_engine
component integrations
component internal_operations
component inventory
component maintainability
component market_validation
component marketplace
component notifications
component observability
component offline
component onboarding
component operations_center
component operations_docs
component operations_mode
component payments
component pilot_program
component platform_trust
component playbooks
component procurement
```

component product_analytics
component product_feedback
component product_intelligence
component realtime
component receipts
component recommendations
component release_notes
component reports
component restock
component retention_engine
component sales
component scaling
component security
component security_maturity
component self_healing
component server
component storage
component support
component trust
component trust_engine
component validation
component workflows
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> admin
Flask --> agents
Flask --> agents
Flask --> agents
Flask --> agents
Flask --> agents
Flask --> agents
Flask --> agents
Flask --> ai
Flask --> ai
Flask --> ai
Flask --> ai
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