NovaOS Build Plan

Overview A concise strategic roadmap for NovaOS, capturing what we have built so far (Phase 1 & 2), and detailing the next phases through to full R&D team orchestration and business-via-text control. This plan is TBI-friendly—clear, step-by-step, no ambiguity.

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1. Completed Work

Phase 1: Core & C-Suite Agents

- **Redis queue** set up (`novaos:tasks`).
- **NOVA-CORE**: Orchestrator, memory & decision engine.
- **CEO-VISION** → CTO-AUTO → CMO-AUTO → CFO-AUTO → CPO-AUTO → CLO-AUTO → CCO-AUTO → RESEARCH-ANALYST → CLARITY-COACH → PROMPT-ENGINEER → ENERGY-GUARDIAN → CHIEF-STAFF chain**
- Verified end-to-end: final output `Final report: "Ready for launch"`.

Phase 2: Infrastructure/Tool-Specialist Agents

- Five stub agents built, running & tested:
- **n8n-FLOW-BUILDER**
- **DROPBOX-FILE-MANAGER**
- **LANGGRAPH-ROUTER**
- **GITHUB-DEPLOYER**
- **RENDER-MANAGER**
- Each picks up Redis tasks and echoes back confirmations.

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2. Immediate Next Step: Phase 3

Goal: Add Platform Integration agents to connect external services.

1. **Shopify-Integrator**: Sync products & orders.
2. **LemonSqueezy-Integrator**: Sales & subscriptions.
3. **Publer-Scheduler**: Social media posts.
4. **Baserow-Sync**: DB row ↔ Redis queue.
5. **Docker-Deployer**: Manage container deployments.
6. **Cloud-Manager**: Provision & scale nodes (AWS/GCP/Render).

Action: Create `agents/.../main.py` stubs and compose entries. Build & test one-by-one.

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3. Phase 4: R&D Squads & Project Managers

Goal: On new product idea, auto-spawn a full R&D team (developer, designer, marketer, QA) with a ProjectManager agent: - `run.sh deploy_team "Your Idea"` - ProjectManager orchestrates Mini-Agents (e.g. Design-Agent, Dev-Agent, QA-Agent).

Action: Define team roles, folder structure `agents/PM-TEAM-<Idea>`, stub loops, compose templates.

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4. Phase 5: Business-via-Text Interface

Goal: Full control via SMS/WhatsApp using Twilio: - Incoming SMS → `TEXT-CONTROLLER` agent → publish tasks → return responses as SMS.

Action: Create `agents/TEXT-CONTROLLER`, integrate Twilio webhook, map commands to Redis tasks.

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5. Quality, Reliability & Performance Enhancements

1. **Logging & Monitoring**: Add structured JSON logs to each agent, centralize with ELK or Grafana.
2. **Health Checks**: Docker healthchecks for Redis & each container.
3. **Auto-Restart Policies**: `restart: always` in compose for resilience.
4. **Container Resource Limits**: CPU/memory quotas.
5. **CI/CD Pipeline**: GitHub Actions to lint, test, build & deploy to Render/Docker Swarm.
6. **Secrets Management**: Move API keys to environment files or Vault.

Save & Use: - Place this file at `/Desktop/NovaOS/BUILD_PLAN.md`. - Review Phase 3 details tomorrow.

NovaOS ready to flip the switch—full visibility, zero guessing.