

# Workspace = Subdomain + Optional Custom Domain — The Story

## 0) The baseline

- Your product runs on the apex saltifysaas.com (marketing, login/register).
- A wildcard like \*.saltifysaas.com is wired to your app so any something.saltifysaas.com can work instantly.
- A tiny resolver in the backend knows how to map any Host (subdomain or custom domain) → workspace (+ tenant).

## 1) Sign-up → instant workspace on a subdomain

### 1) User lands on saltifysaas.com/register.

The form asks: Name, Company, Email, Password, Workspace Subdomain (e.g., alpha).

### 2) On submit, the backend:

- Creates the auth user.
- Creates a Tenant (company) and a Workspace (e.g., “Main”).
- Reserves the global subdomain alpha (unique across the platform).
- Links the user as owner of that tenant/workspace.

### 3) Redirect to https://alpha.saltifysaas.com/onboarding— it resolves immediately because \*.saltifysaas.com is already routed to your app.

What the user experiences: “I typed a subdomain, clicked Create, and boom—I’m in my own workspace URL.”

## 2) How routing works under the hood (every request)

- The Next.js middleware (or edge function) reads the Host header:
- If it's \*.saltifysaas.com, it extracts alpha and asks the backend: “Which workspace is this?”
- If it's a custom domain (e.g., pages.acme.com), it asks: “Which workspace owns this hostname?”
- The backend returns { workspaceId, tenantId }.

Middleware stamps those ids into request headers so all pages and APIs automatically scope data to that workspace/tenant.

- If nothing matches, show a branded 404 (“Workspace not found”).

Result: every page/API call is multi-tenant safe by default because the workspace/tenant context is always present.

## 3) Adding a custom domain (later, from settings)

### 1) The owner opens Workspace → Domains and clicks “Connect domain”.

### 2) They enter pages.acme.com. You show them two DNS steps:

- TXT record for verification (proves ownership)
- CNAME pointing pages.acme.com → your platform edge (so traffic reaches you)

### 3) They hit Verify. Your backend (or your host like Vercel/Cloudflare) confirms DNS has been set and issues SSL.

### 4) Mark the domain verified and active.

From now on, https://pages.acme.com serves the same workspace as https://alpha.saltifysaas.com.

Nice touch: let them choose a Primary domain. That becomes the canonical in emails/links.

## 4) Everyday use (multi-workspace, branding, links)

- A user can belong to multiple tenants/workspaces. The App Launcher shows each by name and

domain; clicking takes them straight to that workspace's host.

- Branding (logo/colors) is stored per workspace. On request, the server reads x-workspace-id and renders the right theme instantly—so alpha.saltifysaas.com and pages.acme.com can look identical or different, your choice.
- Emails & deep links always use the primary domain for that workspace (custom if set, otherwise the subdomain).

#### 5) Safety rails you'll have from day one

- Reserved subdomains: block www, api, cdn, docs, etc.
- Global uniqueness: no two workspaces can claim the same subdomain.
- Domain hijack prevention: a custom domain is inactive until DNS TXT proves ownership and SSL is issued.
- Strict scoping: every DB/API call receives tenantId/workspaceId from middleware; server checks these before returning data.
- Graceful errors: unknown host → workspace 404; domain pending → show “Domain not verified yet” page (optional).

#### 6) Operator view (your side)

- You keep a simple “Host map” in your DB:
- workspaces.subdomain (e.g., alpha)
- domains[] (e.g., pages.acme.com, verified or not)
- A tiny Host Resolver service answers two questions fast:
- “Given alpha.saltifysaas.com, which workspace is this?”
- “Given pages.acme.com, which workspace is this?”
- Your edge provider (Vercel/Cloudflare) handles routing + certificates once you tell it about the domain; your app handles who owns what.

#### 7) The UX flow, as a user

- Day 0: I sign up, choose alpha → I'm instantly inside alpha.saltifysaas.com.
- Day 1: I invite my team, build forms/pages.
- Day 2: I add my domain pages.acme.com, follow DNS steps, click Verify → now my clients see my brand at my URL.
- Always: bookmarks, emails, and deep links open on the correct host with the right data and theme.

#### 8) Rollout plan (short, then sweet)

##### Phase 1 — MVP

- Middleware + Host Resolver
- Register flow that captures subdomain and provisions tenant/workspace
- Auto-redirect to subdomain.saltifysaas.com
- Basic reserved-name checks

##### Phase 2 — Custom Domains

- Domains settings UI (add → show DNS instructions → verify)
- Provider integration (Vercel/Cloudflare) for SSL & activation
- Primary domain toggle + canonical link generation

##### Phase 3 — Polish & scale

- Workspace switcher, branded error pages, analytics per domain
- Rate-limits, audit logs, export, webhooks

9) What changes in your code (conceptually)

- Frontend: Add subdomain field in Register; add middleware that stamps x-workspace-id/x-tenant-id; small Domains settings page.
- Backend: Add a /resolve/host endpoint; extend /auth/register to accept a chosen subdomain and create the workspace; add minimal /domains endpoints for add/verify/list.
- Infra: One-time wildcard for \*.saltifysaas.com. For custom domains, your provider APIs handle certs after you confirm DNS.