CH08 — Entitlements & Plan States

This chapter defines the plan states (Guest/Free/Pro/Trial), the global entitlement matrix, and the app-wide gating behaviors that every feature must respect. It is the single source of truth for what each user can do in V1.

Doc ID: HZ-V1-CH08_Entitlements_And_Plan_States_R1
Revision: R1 (2026-01-02)
Status: Draft
Depends on: HZ-V1-CH00 (Manifest), HZ-V1-CH07 (Auth & Account), HZ-V1-CH25 (Monetization), HZ-V1-CH30 (Safety/Abuse), HZ-V1-CH31 (Error States)
Related: CH12–CH22 (Flow Builder & Practice), CH17–CH19 (Sharing/Inbox/Imports), CH29 (Storage & Limits), CH34 (Export & Deletion), CH33 (Analytics)
Supersedes: None (first revision)
Owned decisions: Plan definitions; entitlement evaluation order; global gating UX patterns; Free caps that are already locked; Practice credit rules; Trial downgrade rules; restore purchase expectations.

Open questions / placeholders

These are not decided in CH08. They must be handled as placeholders and owned by the listed chapters.

- **PLACEHOLDER:** Pro share-link daily cap (if any). Owner: CH17/CH30. Default: soft caps only.

- **PLACEHOLDER:** Pro saved-flow soft cap (if any). Owner: CH15/CH30.

- **PLACEHOLDER:** Pro inbox cap (if any). Owner: CH18/CH30.

- **PLACEHOLDER:** Offline subscription verification grace period (hours/days). Owner: CH28.

- **PLACEHOLDER:** Exact paywall copy, scientific claims placement, and education pages. Owner: CH25/CH26.

- **PLACEHOLDER:** Exact node caps or other creation caps beyond branch=10. Owner: CH12/CH30.

1. Plan states (authoritative definitions)

Important: "Plan state" is not just pricing. It is a runtime state that changes what UI actions are allowed, what data can be persisted, and what screens must appear when a user attempts a restricted action.

1.1 Core plan states (V1)

- **Guest** — No account. Can explore curated demo content and optionally interact in limited, non-persistent ways. Guest cannot persist anything (no saving flows, no saving custom moves, no saving practice history).

- **Free** — Account exists, no active subscription. Can build and save up to 2 flows. Cannot use Practice Mode except via monthly credits. Inbox items are view-only and cannot be practiced.

- **Pro** — Active subscription. Full access to Practice Mode, unlimited saved flows (subject to abuse soft caps), media uploads (subject to 2GB cap), and higher operational limits.

- **Trial** — Time-limited entitlement that behaves exactly like Pro. Trial ends automatically; user becomes Pro (paid) if converted, otherwise downgrades to Free.

1.2 Derived runtime states (implementation convenience)

These are not separate products; they are derived runtime states that influence gating and messaging.

- **Pro (grace)** — Subscription was active recently but cannot be verified due to network / StoreKit failure. Allow Pro features for a short grace window (owned by CH28). Display a non-blocking banner: "Can't verify subscription right now. Some Pro features may pause if this continues."

- **Downgraded** — User was Pro/Trial, now Free. App must preserve existing data but enforce Free gates going forward (e.g., practice locked, flow cap behavior).

- **Account required** — A gating trigger that forces Guest → account creation before any persistence action.

2. Entitlement evaluation order

The app must compute a single **effective entitlement snapshot** at runtime. Every screen and action reads from that snapshot (not from scattered flags).

- If no authenticated user -> state = **Guest**.

- If authenticated user -> start as **Free**.

- If StoreKit indicates active subscription OR trial -> state = **Pro/Trial** (Trial behaves as Pro).

- If StoreKit cannot verify and a recent verified snapshot exists -> state may be **Pro (grace)** (owned by CH28).

- If user is in transition (purchase pending) -> keep current state but show purchase-in-progress UI; do not unlock until confirmation.

Snapshot fields (minimum)

- planState: guest | free | trial | pro | pro_grace

- canPersist: boolean (guest=false)

- savedFlowCap: integer or None (None = unlimited)

- inboxCap: integer or None

- canPractice: boolean

- practiceCredits: integer (free only; resets monthly)

- canPracticeInboxItems: boolean

- canUploadMedia: boolean

- mediaCapBytes: integer (2GB cap applies to Pro uploads; owned by CH29)

- branchCapPerMove: integer (10; global lock)

- gatingReasonCodes: canonical strings used for analytics + consistent UI copy

3. Global gating UX patterns (no-guesswork rules)

When a restricted action is attempted, the UI response must be consistent across the app. This section standardizes the gating patterns so users do not feel tricked or confused.

3.1 Gating components (standard)

- **Account gate** (Guest → Sign Up): used for any persistence attempt (save flow, save move, save edits, save practice log, export).

- **Paywall gate** (Free → Pro/Trial): used for Pro-only features (Practice, upload media, etc.). Uses CH25 for final layout + copy; CH08 defines when it triggers.

- **Soft cap gate** (limits but not paywall): used for abuse prevention (see CH30). Typically: warning → cooldown → block.

- **Upsell inline**: non-blocking prompt embedded in a relevant moment (e.g., practice tab teaser). Must not interrupt core actions more than once per session unless user taps for details.

3.2 Mandatory gating rules (V1 locks)

- **Guest cannot save anything.** Guest may browse and interact with demo content, but any attempt to save triggers Account Gate.

- **Free saved flows cap = 2.** Attempting to save a 3rd flow triggers a cap gate with two options: (1) Upgrade to Pro, (2) Manage flows (delete/replace).

- **Practice Mode is paywalled.** Free users can access Practice only via monthly practice credits and only for saved flows (not inbox items).

- **Free inbox cap = 10.** Free can view inbox items but cannot practice them. If inbox full, receiving import is blocked until user clears items or upgrades.

- **Uploads are Pro-only.** Uploaded videos are private-only and not shared; link-based media is shareable (see CH29).

4. Entitlement matrix (what each plan can do)

To avoid giant wide tables, the matrix is split by feature domain. Unless explicitly stated, Pro and Trial are equivalent.

4.1 Account & persistence

Capability	Guest	Free	Pro / Trial
Browse curated demo flows	Yes	Yes	Yes
Create account / log in	Prompted	N/A	N/A
Save flows (anywhere)	No	Yes (cap 2)	Yes (unlimited)
Save custom moves / edits	No	Yes	Yes
Practice history & streaks	No	Limited (credit sessions only)	Yes
Export data (future-proof)	No	Optional (placeholder)	Yes (placeholder)

4.2 Flows & flow builder

Capability	Guest	Free	Pro / Trial
Create/edit flows	Limited (demo-only)	Yes	Yes

Capability	Guest	Free	Pro / Trial
Outgoing branches per move	Up to 10	Up to 10	Up to 10
Merges (multiple incoming)	Yes	Yes	Yes
Dangling paths allowed	Yes	Yes	Yes
Reorder nodes / replace root	Yes	Yes	Yes
Save drafts	No (no persistence)	Yes	Yes

4.3 Sharing & Inbox

Capability	Guest	Free	Pro / Trial
Create unlisted share links	No	Limited (placeholder)	Yes (higher limits; placeholder)
Open share link & view flow	Yes	Yes	Yes
Accept imports into Inbox	Yes (view-only)	Yes (cap 10; view-only)	Yes (cap soft)
Practice imported Inbox item	No	No	Yes
Move Inbox item to saved library	No	Yes (if within flow cap)	Yes

4.4 Practice Mode

Capability	Guest	Free	Pro / Trial
Practice saved flows	No	Yes (credits only)	Yes (unlimited)
Practice Inbox items	No	No	Yes
Monthly practice credits	N/A	3 / month	N/A
Practice session length	N/A	No restriction	No restriction
Logging (actual duration)	No	Yes (credit sessions)	Yes

4.5 Media rules

Capability	Guest	Free	Pro / Trial
Attach link-based media (YouTube, etc.)	View only	Yes	Yes
Upload video from gallery/camera	No	No	Yes (private-only)
Upload cap (all uploads total)	N/A	N/A	2GB total cap

Capability	Guest	Free	Pro / Trial
Uploads are shareable via links	No	No	No (private-only; use links to share)

5. Practice credits (Free)

Practice is a Pro feature. Free users receive a small number of **practice credits** so they can experience the core value without immediately hitting a hard wall.

- **Grant:** Free receives 3 practice credits per month (reset monthly).
- **Spend rule:** Starting a Practice session on a **saved flow** consumes 1 credit. Credits cannot be used on Inbox items.
- **Scope:** Credit covers the entire session regardless of duration or number of paths selected.
- **Exhaustion behavior:** When credits = 0, attempting to start practice triggers Paywall Gate (CH25).
- **Transparency:** Practice entry points must clearly show remaining credits: "Credits: 2/3 this month".
- **Anti-exploit:** Credits cannot be transferred; reinstalling does not reset credits; credits are tied to account.

5.1 Credit UI surfaces (minimum)

- Practice tab header: shows remaining credits (Free only).
- Flow detail screen: practice CTA shows either "Practice (1 credit)" or "Practice (Pro)".
- Paywall: includes a short explanation that Pro removes credit limits and unlocks full practice features.
- Settings -> Subscription: shows current plan and next renewal date (Pro/Trial) or upgrade CTA (Free).

6. Trial behavior (7-day trial)

- **Trial = Pro.** During trial, all Pro gates are removed (Practice, uploads, etc.).
- **Start trial triggers:** any Pro-only gate can offer a trial CTA (owned by CH25).
- **End of trial:** if user converts, plan becomes Pro; if user cancels or trial expires without conversion, plan becomes Free.
- **Downgrade enforcement:** if user downgrades to Free and has more than 2 saved flows, do not delete data; enforce cap by making flows beyond the cap read-only until upgrade or deletion (UX owned by CH15/CH25).
- **Restore purchases:** must be available from Settings and from paywall if purchase state is unclear.

7. Standard gating copy (non-final, but canonical intent)

Exact marketing copy is owned by CH25/CH26. CH08 defines the intent so engineering can implement consistent triggers.

- **Account Gate (Guest saving):** "Create an account to save your work." Secondary line: "Guest mode is for exploring only."

- **Flow cap gate (Free cap=2):** "You've reached the Free limit (2 saved flows)." Options: "Upgrade to Pro" and "Manage flows".

- **Practice credit gate:** If credits remain: "This practice uses 1 credit." If credits exhausted: "Practice is a Pro feature."

- **Inbox practice gate (Free):** "Save this flow to your library to practice it." (then apply flow cap rules).

- **Upload gate (Free):** "Uploads are Pro-only. Use links to share videos."

8. Subscription system expectations (StoreKit)

Implementation details live elsewhere, but CH08 defines what must be true from the product perspective for App Store readiness.

- Use StoreKit subscriptions (iOS-only V1).

- A single monthly product at $9.99 with a 7-day trial is the default direction (see CH25).

- The app must support: purchase, restore, cancel flow (link out to Apple subscription management), and a clear plan status screen.

- When purchase is pending or fails, keep user in their current plan and show a recoverable error state (see CH31).

9. Analytics hooks (entitlement-related)

Event taxonomy is owned by CH33, but CH08 specifies the minimum events needed to validate gating and conversion flows.

- entitlement_snapshot_loaded (planState, creditsRemaining, caps)

- gate_shown (reasonCode, planState, surface=flow_save|practice_start|upload|share|inbox)

- upgrade_clicked (surface, planState)

- trial_started / purchase_started / purchase_success / purchase_failed

- restore_clicked / restore_success / restore_failed

- credit_spent (flowId, sessionId)

- downgrade_detected (previousPlan, newPlan, hasOverCapFlows)

10. Acceptance tests (Given / When / Then)

- **Guest saving:** Given I am a Guest, when I tap Save on a flow, then I see the Account Gate and the flow is not persisted.

- **Free flow cap:** Given I am Free with 2 saved flows, when I attempt to save a new flow, then I see the cap gate with Upgrade and Manage options, and the save does not complete.

- **Free credits:** Given I am Free with 2 credits remaining, when I start Practice from a saved flow, then 1 credit is consumed and the session begins.

- **No inbox practice for Free:** Given I am Free, when I open an Inbox flow and tap Practice, then I see gating that instructs saving to library (and cap rules apply).

- **Inbox cap:** Given I am Free with 10 inbox items, when I receive another import, then the import is blocked with a clear message and a CTA to clear items or upgrade.

- **Trial parity:** Given I am in Trial, when I open Practice or Upload, then no paywall or credit gates appear.

- **Downgrade behavior:** Given I was Pro and saved 10 flows, when my plan becomes Free, then my data remains intact and the app enforces Free cap without deleting flows.

- **Uploads:** Given I am Pro, when I upload a video under the 2GB cap, then it saves as private-only and is not included in share payloads.

11. Replit build prompt (chapter-specific)

```
You are implementing Handz V1. Use CH00 and CH08 only.

Goal: implement a global Entitlements system and gating utilities that every screen
can call.

Build steps:
1) Create an EntitlementsContext that exposes:
- planState (guest/free/trial/pro/pro_grace)
- caps (savedFlowCap=2 for free; inboxCap=10 for free; branchCapPerMove=10)
- practiceCreditsRemaining (free only; 3/month)
- booleans: canPersist, canPractice, canPracticeInboxItems, canUploadMedia,
canCreateShareLinks

2) Implement a single function: requireEntitlement(action, context) -> { allowed,
gateType, reasonCode }.
Actions to support now:
- SAVE_FLOW, START_PRACTICE_SAVED_FLOW, START_PRACTICE_INBOX_FLOW, UPLOAD_MEDIA,
CREATE_SHARE_LINK, ACCEPT_IMPORT, SAVE_CUSTOM_MOVE

3) Implement standard gating surfaces:
- AccountGateModal for Guest persistence attempts
- PaywallModal for Pro features (stub content; final layout owned by CH25)
- CapGateSheet for flow cap and inbox cap (Upgrade / Manage)

4) Wire gating into key CTAs:
- Save Flow button
- Practice button (Flow Detail)
- Practice button (Inbox item)
- Upload button (Move editor)
- Share button (Flow Detail)

5) Add analytics hooks:
- gate_shown, upgrade_clicked, credit_spent (stub logger if analytics not ready)

Constraints:
- Do not guess caps; use CH08 exactly.
- If you must make an assumption, write it in a PRD_ASSUMPTIONS block and stop that
feature.
```

12. Troubleshooting notes (chapter-specific)

- **Symptom:** user sees Pro UI but gates still appear. **Check:** entitlement snapshot refresh timing; ensure UI reads from the same snapshot used by requireEntitlement().

- **Symptom:** credits not decrementing. **Check:** credit spend is tied to "session start" and is transactional; prevent double-spend on screen re-mount.

- **Symptom:** user downgraded but cannot access any flows. **Check:** cap enforcement should be "read-only beyond cap", not "hide everything".

- **Symptom:** Inbox full blocks imports unexpectedly. **Check:** distinguish "import receipt" vs "save to library"; Free cap 10 applies to Inbox items stored.

- **Symptom:** uploads included in share payloads. **Check:** enforce CH29: uploaded media is private-only and must be excluded from share/export.