**State vs. Config: File Type Separation**

**1. Project State File (.dspproj)**

**Purpose:**  
Full preservation of a session inside the DSP Designer App.

**Contents:**

* DSP chain layout (columns, order, module positions)
* Audio file references (path, waveform zoom position, etc.)
* Module parameters
* Macro mappings
* UI layout preferences (e.g. open tools, window states)
* Tool metadata, version tags
* Analysis overlays, user comments, etc.

**Use:**

* Only for the app
* Restores *exact creative environment*
* Can evolve with the app's feature set (not fixed schema)

**2. Plugin Config File (.dspconfig / .json)**

**Purpose:**  
Lightweight, portable configuration used by the REAPER plugin (or others in the future).

**Contents:**

* DSP module chain (ordered)
* Module types and exact parameter values
* Optional: wet/dry/macro controls
* Minimal metadata (name, description, version)

**Use:**

* Consumed by runtime plugin engine
* **Does not include:** layout data, UI states, audio file references, analysis tools
* Meant to be compact and future-proof

**🧠 Design Principles:**

* Keep plugin config files **clean, minimal, and platform-agnostic**.
* Plugin config schema can be **versioned** to adapt over time.
* Project state is for **you**, the creative toolmaker.  
  Plugin config is for **the world**, the end users and productions.

**📦 Optional Export Settings:**

When exporting a config from the app, allow the user to choose:

* ✅ Plugin Target:
  + REAPER, Bitwig, Live, etc. (if different plugin formats emerge)
* ✅ Format Options:
  + Compact Config
  + Annotated (e.g., include comments, descriptive labels)

This futureproofs your platform and allows *per-DAW customization* later, without needing to rewrite the core logic.