**Document: 08a – UI Component Mapping (shadcn → KendoReact Fluent 2)**

**Project:** MCPX-KendoBridge Admin Portal  
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**Document Control**

| **Version** | **Date** | **Author** | **Change Summary** | **Status** |
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| 1.0.0 | 2025-09-27 | UX/FE Leads | Initial shadcn/Radix → **KendoReact Fluent 2** map | Draft |

**Approvals**

| **Role/Team** | **Name** | **Signature/Date** | **Comment** |
| --- | --- | --- | --- |
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| DevSecOps / SRE |  |  |  |

**1. Purpose**

Provide a **1:1 migration map** from the Figma Make prototype (shadcn/Radix visuals) to **KendoReact (Fluent 2 theme)**, so developers implement a consistent, accessible, production UI without mixing libraries.

**2. Scope**

All portal routes: /login, /dashboard, /config, /config/keys, /flags, /lookups, /jobs, /audit, /evidence, /access, /security/cors.  
Design tokens come from **ThemeBuilder**; **KendoReact Fluent 2** is the **only** production UI library.

**3. Theme & Global Setup**

* **Theme import (CSS):**
* // web/src/main.tsx
* import '@progress/kendo-theme-fluent/dist/all.css'; // or ThemeBuilder package path
* **Theme import (ThemeBuilder export):**
* // Example if you vend a custom package from /design/themebuilder/export/mcpx-kendobridge
* import 'design/themebuilder/export/mcpx-kendobridge/dist/css/kendo-theme-fluent.css';
* **Providers at app root:** Kendo IntlProvider (dates/numbers), React Router, MSAL provider.
* **No hard-coded colors/sizes.** Use tokens and Kendo’s utilities.

**4. Component Mapping Table**

| **Prototype Element (shadcn/Radix)** | **KendoReact Fluent 2** | **Notes / Usage Pattern** |
| --- | --- | --- |
| App Shell (Sidebar + Header) | **Drawer**, **AppBar**, **Avatar**, **Menu** | Drawer collapses on <768px; AppBar hosts env badge & user menu |
| Card | **Card** | KPI tiles, section containers |
| Button | **Button** | Primary/secondary/tokenized sizes |
| Tabs | **TabStrip** | For segmented content |
| Breadcrumb | **Breadcrumb** | Reflect route hierarchy |
| Table/DataGrid | **Grid** | Server paging/filter/sort; CSV export |
| Pagination | **Grid** built-ins | Use pageable config |
| Dialog/Modal | **Dialog** | Confirmation/edit forms; focus trap |
| Toast/Notification | **Notification** | Success/info/error; live region |
| Tooltip | **Tooltip** | Keyboard accessible |
| Accordion/Disclosure | **ExpansionPanel** / **PanelBar** | Choose based on nesting needs |
| Dropdown Menu | **DropDownButton** / **Menu** | Menus for action lists; buttons for inline menus |
| Select/Autocomplete | **DropDownList**, **ComboBox**, **AutoComplete** | Choose by search vs strict list |
| Inputs (text/number/date) | **Input**, **NumericTextBox**, **DatePicker** | Kendo Form integrates validation |
| Switch/Toggle | **Switch** | Feature flags, boolean config |
| Progress Bar | **ProgressBar** | Job progress |
| Skeleton/Placeholder | **Skeleton** | Any load >250ms |
| Charts | **Charts** | Line/area/bar for SLI trends |
| Sidebar “Sheet”/Slide-over | **Drawer** | Use right-side Drawer for details |
| Resizable Panels | **Splitter** | Instead of custom resizable divs |
| Carousel | **Carousel** | Use sparingly for visuals |

**5. Route-by-Route Mapping**

**5.1 /login**

* **Kendo**: minimal (MSAL handles redirect). Optional **Card** with status/spinner.
* **AC:** Redirect to AAD; on return route → /dashboard. No tokens in localStorage.

**5.2 /dashboard**

* **Cards**: Kendo **Card** x N (Health/Ready, Version/Uptime, Queue Depth, p50/p95, Error %).
* **Charts**: Kendo **Chart** (time-series for req rate & error %).
* **Env Badge**: **Badge** in **AppBar**; value from /config/effective.

**5.3 /config (Effective Config – read)**

* **Grid**: columns [key, value, type, scope, lastChanged, tags].
* **Actions**: CSV export; filter/search; server pagination.
* **A11y**: header cells labelled; keyboard nav.

**5.4 /config/keys (mutations)**

* **Grid** + **Dialog** for Add/Update (Kendo **Form** with validators).
* **Toasts** on success/failure (show requestId).
* **Audit** drawer: Kendo **Drawer** or **Dialog** with before→after JSON.

**5.5 /flags**

* **Grid** with **Switch** toggle; optional **DropDownList** for env/role targeting.
* **Badge** showing current evaluation for the viewing user/env.

**5.6 /lookups**

* **Grid** per domain with Add/Update **Dialog**; **Switch** to deprecate (add-only policy).
* Referential hints rendered below editor (read-only pointers).

**5.7 /jobs**

* **Create Job** form (Kendo **Form**); on submit → Job ID.
* **SSE Panel**: progress list + **ProgressBar**; **Notification** for status.
* **Reconnect** banner (visible when SSE reconnects with backoff).

**5.8 /audit**

* **Grid** with filters (actor/action/entity/date); details **Drawer** shows before→after.
* Export CSV.

**5.9 /evidence**

* **Grid**: releases + artifact links; **Badge** for attestation present.
* Inline checksum display.

**5.10 /access**

* **AutoComplete** for AAD users; role assignment via **Switch** or **DropDownList**.
* If Graph write disabled, **Dialog** to generate Change Request.

**5.11 /security/cors**

* **Grid** of allowed Origins; Add/Remove via **Dialog**; optional approval (two-person) captured in audit.

**6. Patterns (With Code Sketches)**

**6.1 Grid with Server Operations**

// Pseudocode: server paging/sorting/filtering

<Grid

data={data}

pageable={{ buttonCount: 5, pageSizes: true }}

sort={sort}

filter={filter}

onDataStateChange={(e) => setState(e.dataState)}

/>

**6.2 Form Dialog (Create/Update)**

<Dialog title="Edit Config" onClose={close}>

<Form onSubmit={onSubmit} render={(form) => (

<>

<Field name="key" component={Input} />

<Field name="value" component={Input} />

<Field name="type" component={DropDownList} data={types}/>

<DialogActionsBar>

<Button themeColor="primary" disabled={!form.allowSubmit}>Save</Button>

<Button onClick={close}>Cancel</Button>

</DialogActionsBar>

</>

)}/>

</Dialog>

**6.3 SSE Progress Pane**

// openEventStream returns an EventSource; render heartbeat + progress events

useEffect(() => {

const es = openEventStream(`/jobs/${id}/events`);

es.onmessage = (e) => setItems((prev) => [...prev, JSON.parse(e.data)]);

es.onerror = () => setReconnecting(true);

return () => es.close();

}, [id]);

**7. Accessibility Mapping (WCAG 2.2 AA)**

* **Focus**: visible outlines on interactive elements; verify Drawer/Dialogs trap focus.
* **ARIA**: role/state on Switch, Dialog, Tabs, Progress; toasts use **live region**.
* **Keyboard**: full keyboard path for each page; Space/Enter on switches and toggles.
* **Contrast**: tokens ≥ 4.5:1; verify charts’ color ramps.
* **Axe CI**: run on /dashboard, /config, /jobs, /access flows.

**8. Visual & Responsive Rules**

* **Breakpoints**: desktop ≥1280, tablet 768–1279, mobile <768.
* **Drawer**: expanded on desktop, icon-only on tablet, overlay on mobile.
* **Charts**: defer render below 768 or lazy-load when visible.
* **Skeletons**: show for any remote fetch >250ms.

**9. Error & Empty States (Envelope-Driven)**

* Use standardized envelope { code, message, details?, requestId }.
* Empty grids show help text + primary action (e.g., “No flags yet — Add flag”).
* All failure toasts show requestId for support.

**10. ThemeBuilder Integration Tasks**

1. Export Fluent 2 tokens (colors, radii, typography) from **ThemeBuilder**.
2. Vend under design/themebuilder/export/mcpx-kendobridge.
3. Import CSS/SCSS in web/src/main.tsx or global stylesheet.
4. Validate token parity in /dashboard (contrast), /flags (switch color), /jobs (progress).

**11. Page Checklist (per route)**

* Kendo-only components used; no shadcn/Radix in production build.
* Keyboard path verified; axe shows **0 critical**.
* Grid operations server-driven; CSV export where applicable.
* Error envelope surfaced with requestId.
* Env badge from /config/effective.
* SSE panel meets **TTFB ≤ 200ms** and heartbeat **≤ 10s** (jobs).
* Tokens applied; contrast verified.

**12. Developer Handoff**

* **Story templates** reference this mapping.
* **PR checklist** includes: “Kendo-only”, “axe 0 critical”, “env badge wired”, “envelope errors”, “SSE thresholds (if applicable)”.
* **Visual parity**: attach side-by-side screenshots (Figma vs Kendo) in PR.

**13. Open Issues**

* Confirm whether **ExpansionPanel** or **PanelBar** best fits Config subsections.
* Decide on **AutoComplete** vs **ComboBox** for Access user search (volume expected).
* Validate ThemeBuilder package path & versioning strategy.

**End of Document — TJ-MCPX-DOC-08a v1.0.0**