Adobe
ContextHub Deep Dive
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Agenda

- About ContextHub
- Content of demo content-package
- Demo: ContextHub config
- Demo: Embedding ContextHub on a page
- Resources and client libraries
- Store types
- Persistence types
- Segments
- Extension points
- Demo: Custom mode, store, module
- Demo: Content targeting

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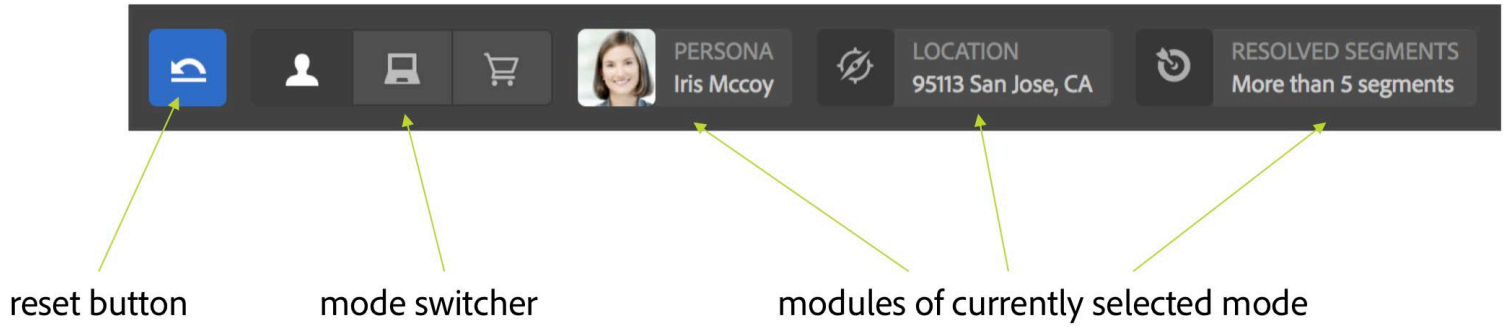
About ContextHub

About ContextHub

- Gems Session: Introduction to ContextHub in AEM 6.4
- Feature description and use case
  - ClientContext successor
  - Touch UI
  - Dynamic Client Library
  - Delivered in a set of minified resources: kernel.js, ui.js and styles.css
  - Event throttling and optimization
  - Diagnostics page
  - Segment engine



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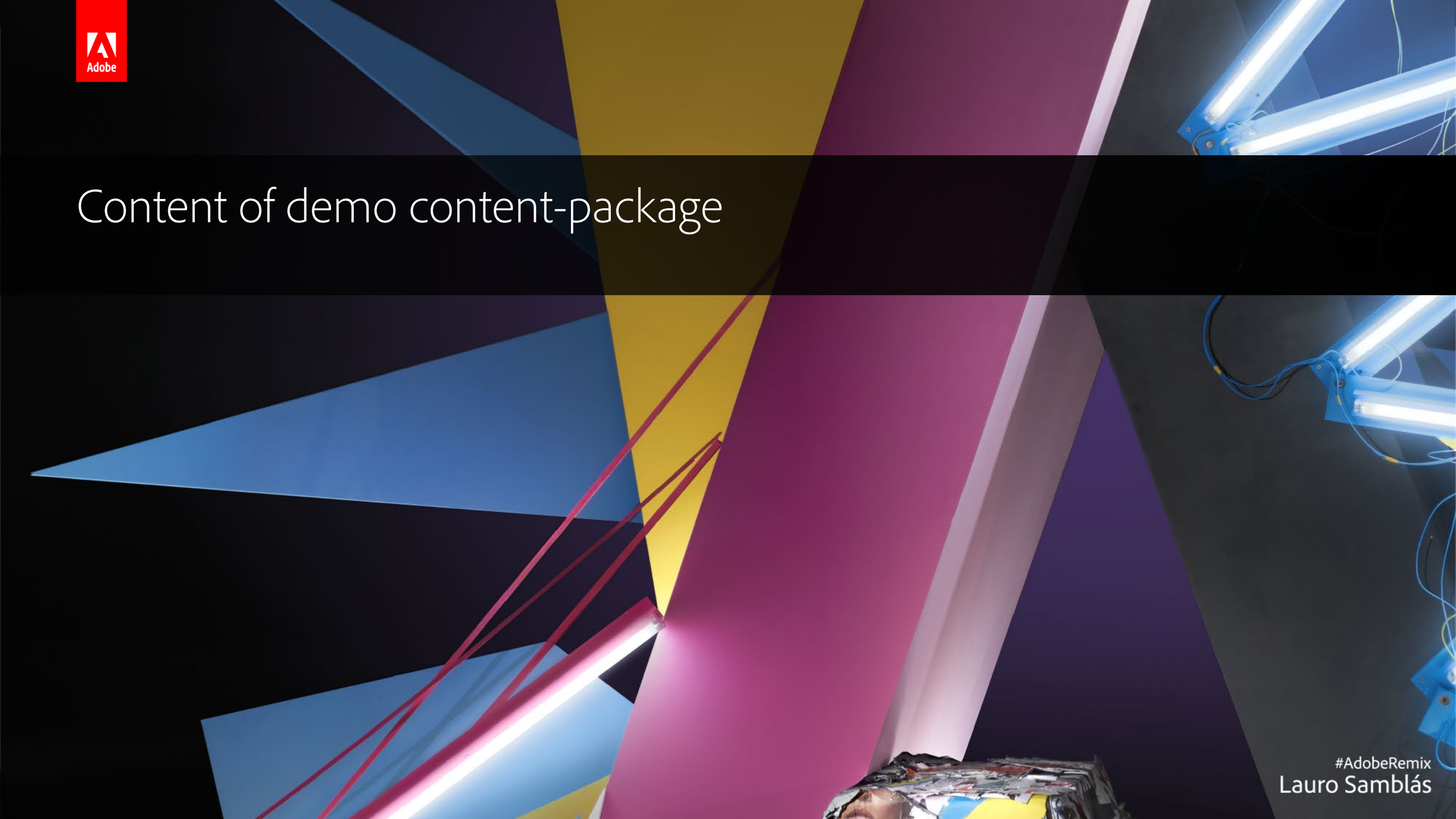
Content of demo content-package



Content of demo content-package

- `/conf/contexthub-gems/settings/wcm/templates/content-page` - page template
- `/conf/contexthub-gems/settings/cloudsettings/sample-config/contexthub` - modes, stores, modules
- `/conf/contexthub-gems/settings/wcm/segments` - segments
- `/content/campaigns/contexthub-gems` - campaign and targeted content
- `/content/contexthub-gems/us/en` - sample page
- `/apps/contexthub-gems/stores` - sample stores
- `/apps/contexthub-gems/modules` - sample modules
- `/apps/contexthub-gems/extensions/operators` - custom operator (for segment editor)
- `/apps/contexthub-gems/extensions/scripts` - custom script (for segment editor)

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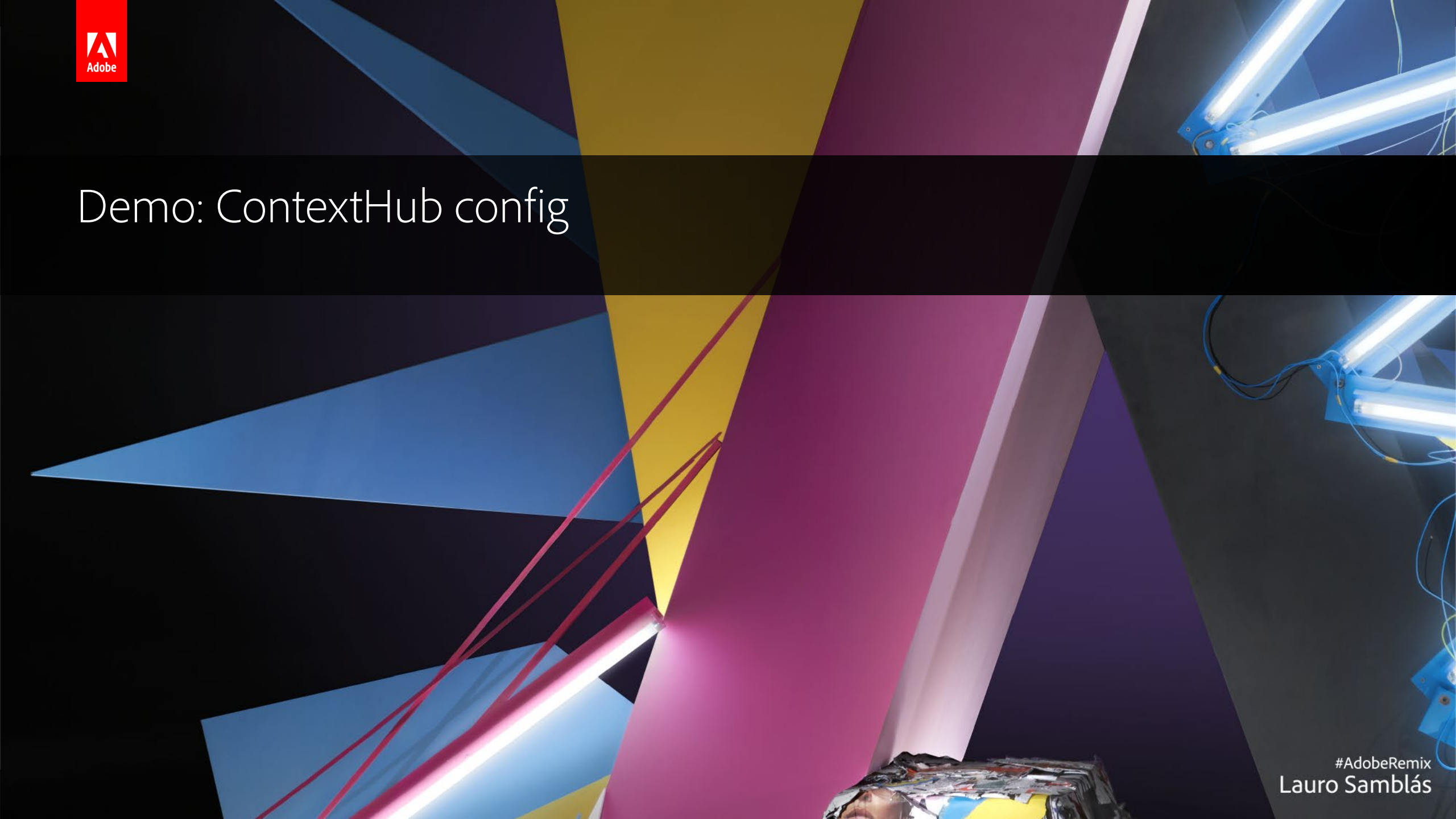
Demo: ContextHub config



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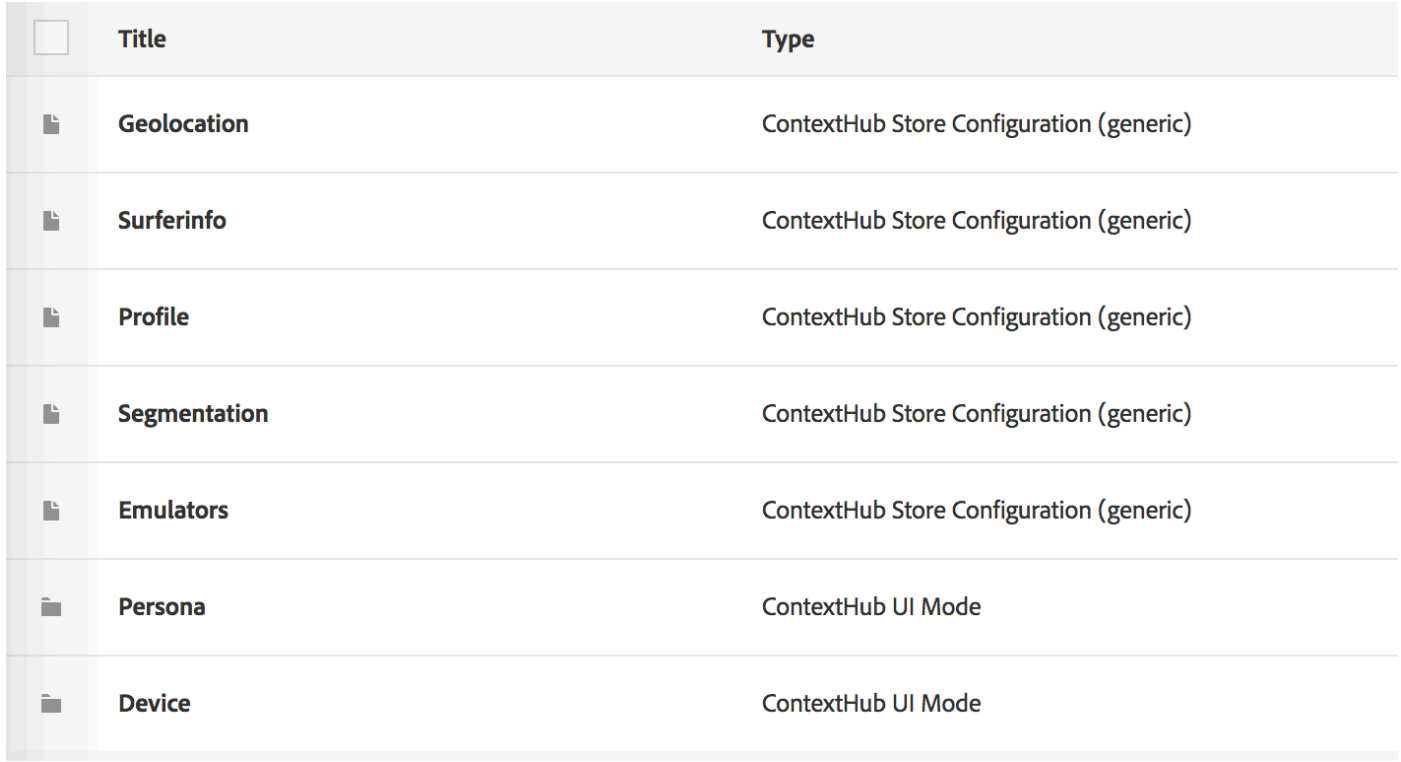
Demo: ContextHub config

- CloudSettings console
  - http://localhost:4502 > Tools > Sites > ContextHub
  - http://localhost:4502/libs/granite/cloudsettings/ui.html/cloudsettings

- What's there?
  - Brand listing
  - Configuration container
  - ContextHub config
    - Modes, Modules and Stores



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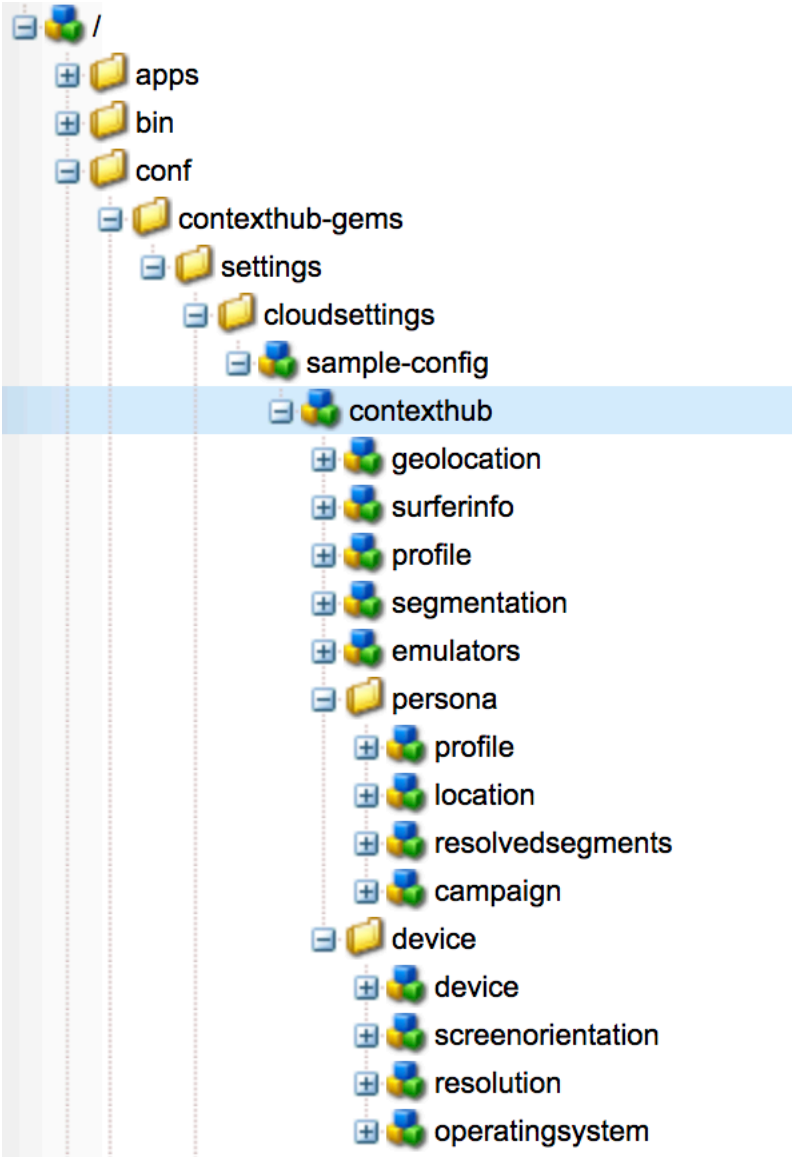
Demo: ContextHub config

- Config in CRX/DE
  - /conf/contexthub-gems/settings/cloudsettings/sample-config/contexthub
  - http://localhost:4502/crx/de/index.jsp#/conf/contexthub-gems/settings/cloudsettings/sample-config/contexthub



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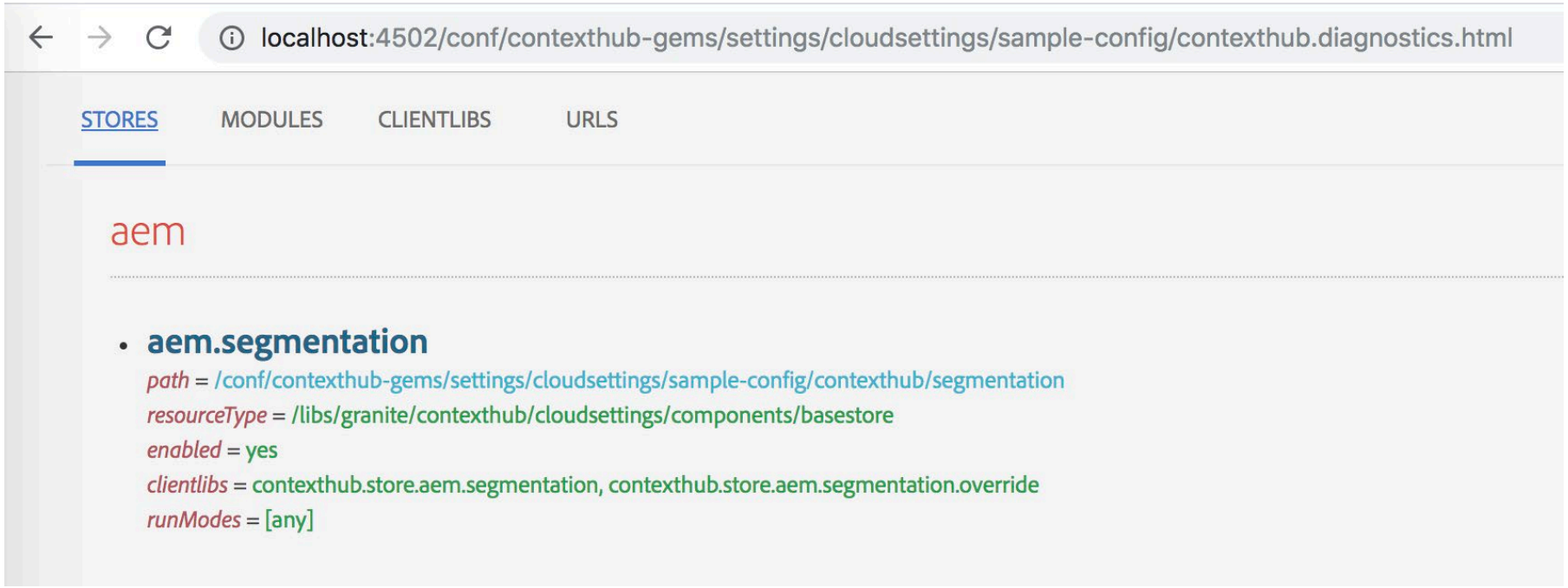
Demo: ContextHub config

- Diagnostics page (available only in debug mode)
  - Config path + “diagnostics” selector
  - http://localhost:4502/conf/contexthub-gems/settings/cloudsettings/sample-config/contexthub.diagnostics.html



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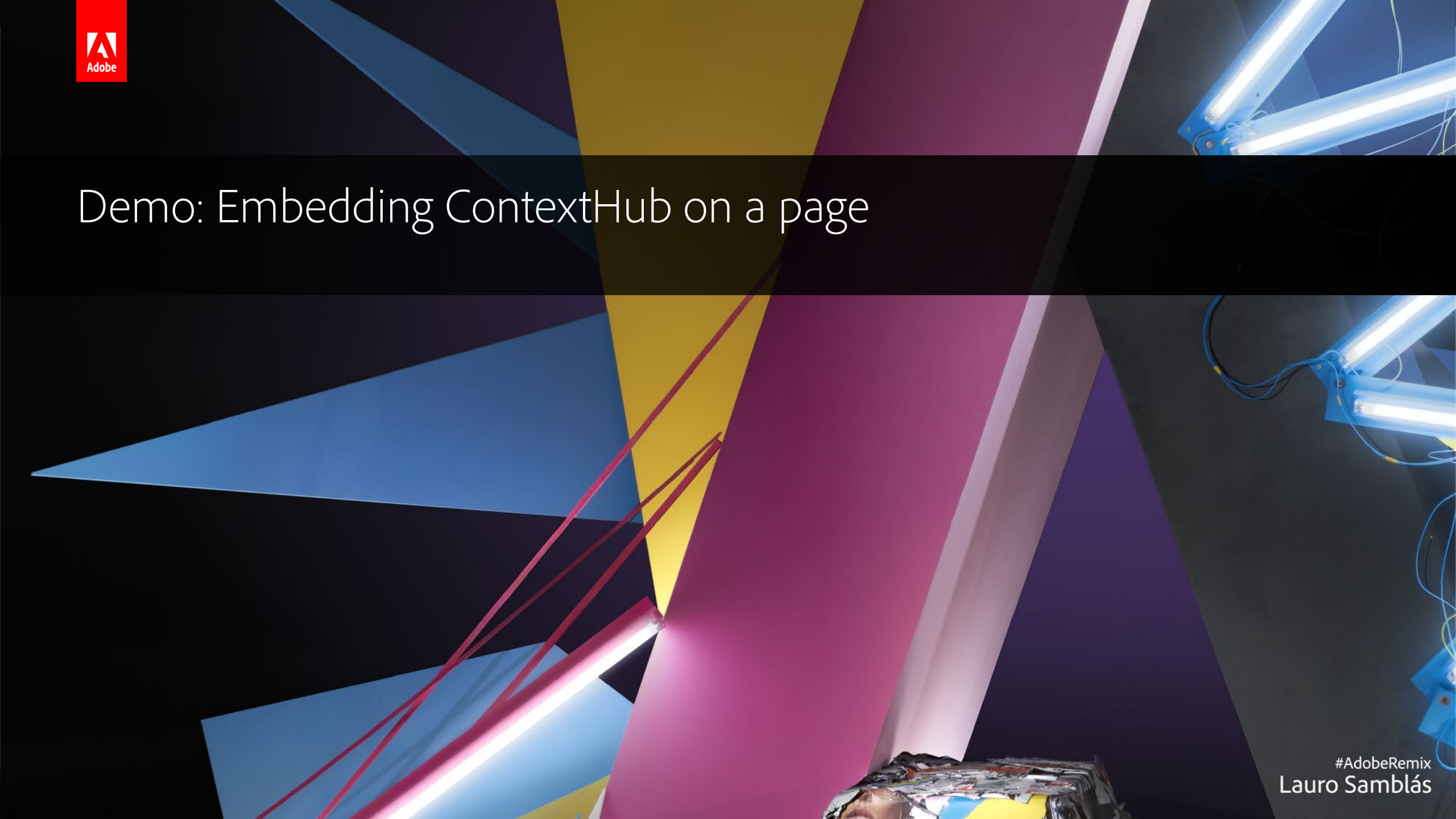
Demo: Embedding ContextHub on a page



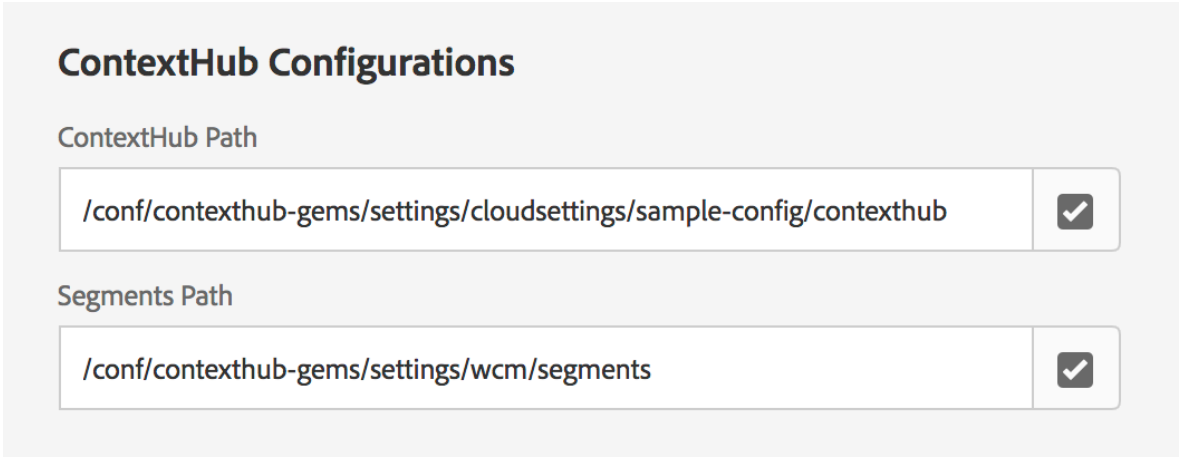
Demo: Embedding ContextHub on a page

- You need to add following line to header of your page

```
<sly data-sly-resource="${'contexthub' @
    resourceType='granite/contexthub/components/contexthub'}"/>

<sling:include path="contexthub"
    resourceType="granite/contexthub/components/contexthub"/>
```

- Select ContextHub config in Page Properties > Personalization



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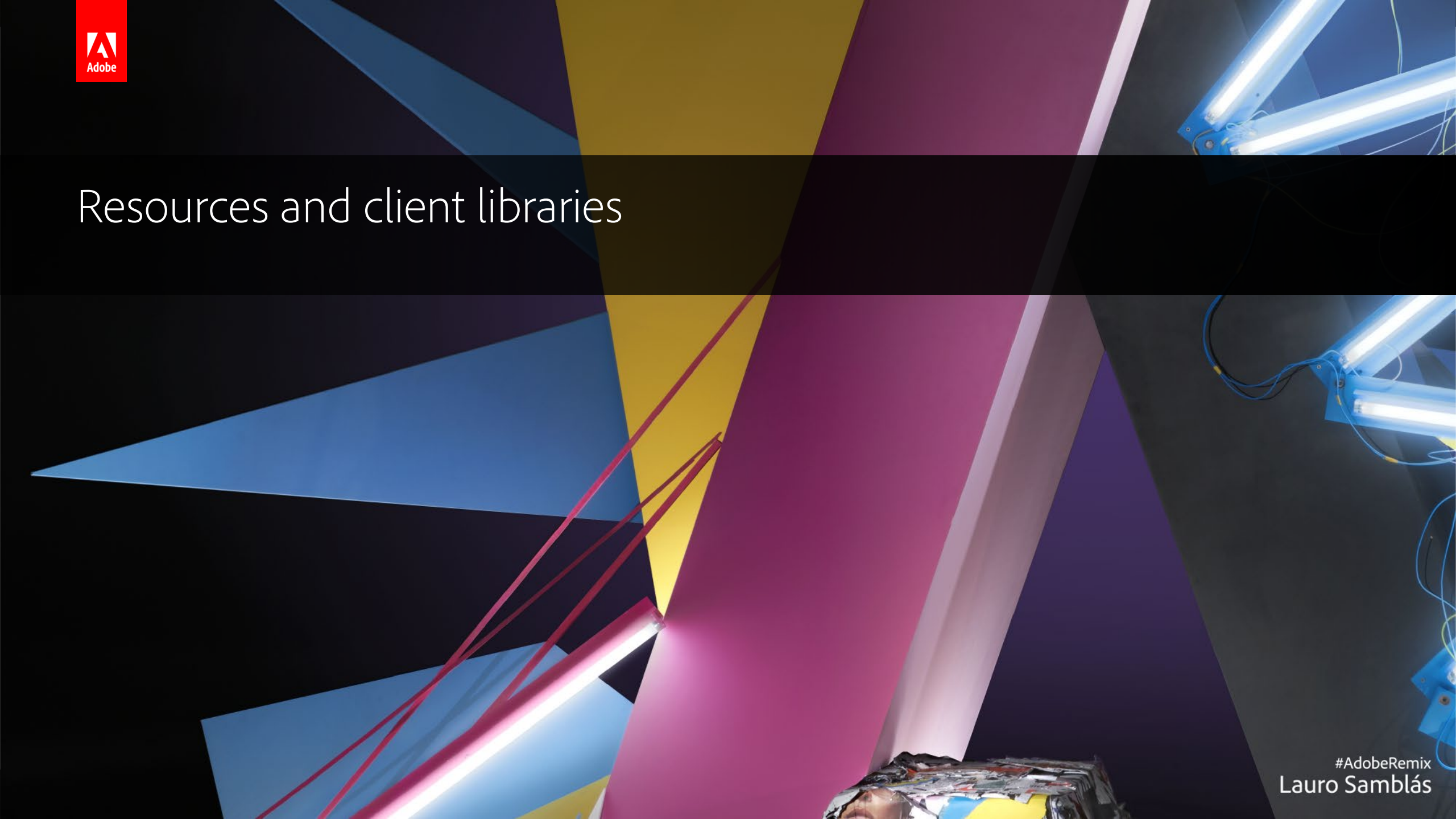
Resources and client libraries



Resources and client libraries

- ContextHub resources are split into 3 requests
  - kernel.js
  - ui.js / styles.css (loaded only on author instance)
- Confg determines which modes, modules and stores are added
  - Disabled are skipped
  - storeType and moduleType property determines which clientlibs are embedded
    - storeType: "`gems.sample`" => "`contexthub.store.gems.sample`"
    - moduleType: "`gems.sample`" => "`contexthub.module.gems.sample`"

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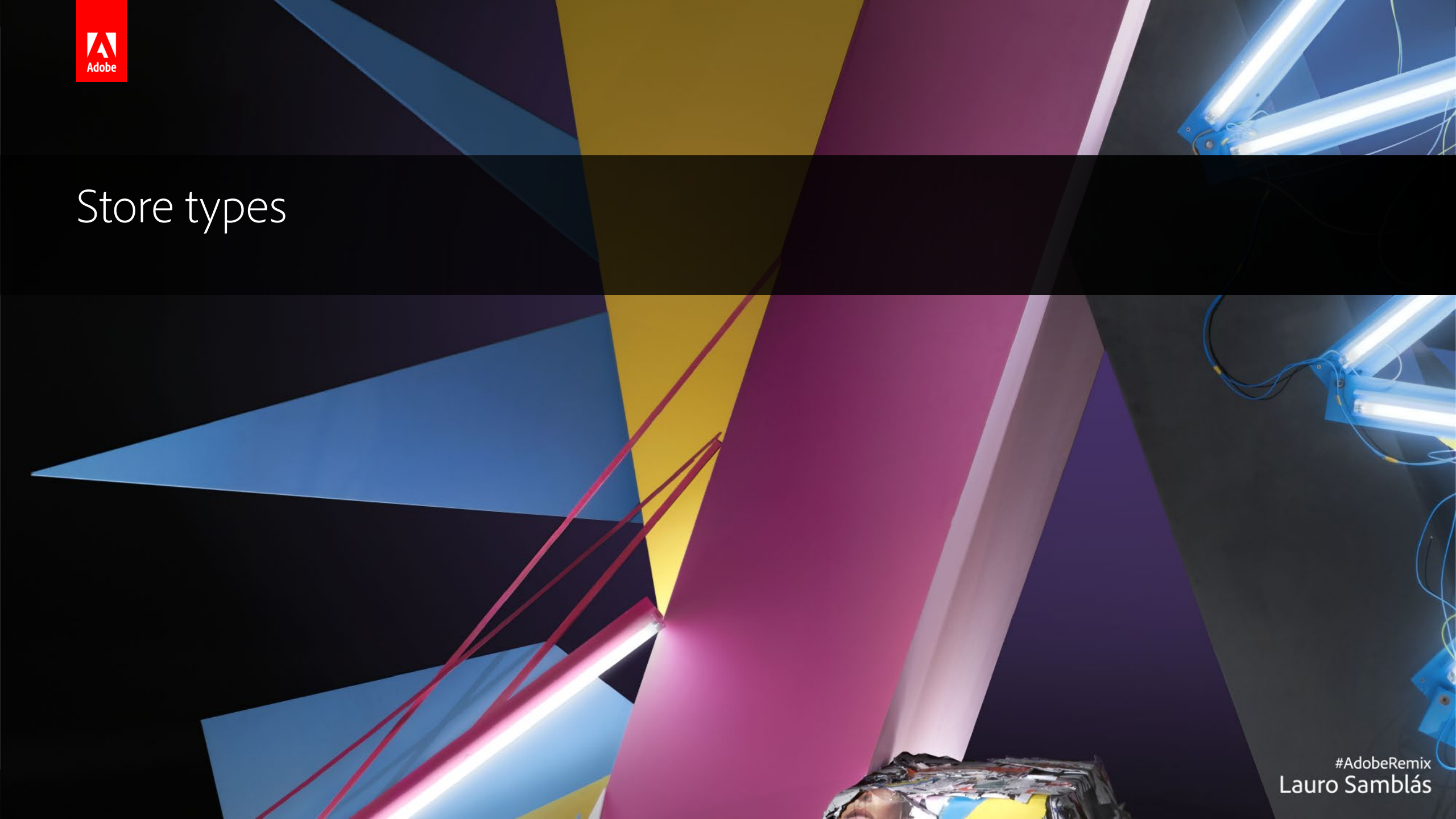
Store types



Store types

- `ContextHub.Store.SessionStore`
  in-memory persistence, that gets cleared when leaving a page
- `ContextHub.Store.PersistedStore`
  uses local storage persistence
- `ContextHub.Store.JSONPStore`
  same as SessionStore, but additionally data is pulled from external jsonp service
- `ContextHub.Store.PersistedJSONPStore`
  same as JSONPStore, except that data is persisted in local storage

```
ContextHub.Utils.inheritance.inherit(MyStore, ContextHub.Store.<generic-store>);
```

- `Samples: /apps/contexthub-gems/stores`

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Persistence types

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Persistence types

- HTML5 localStorage (`ContextHub.Utils.Persistence.Modes.LOCAL`)
  storage of around ~5MB, data has no expiration and is available after reloading page or closing/re-opening browser
- HTML5 sessionStorage (`ContextHub.Utils.Persistence.Modes.SESSION`)
  similar to localStorage, except that data gets cleared when the page session ends
- Cookie (`ContextHub.Utils.Persistence.Modes.COOKIE`)
  holds up to 4KB of data (this storage type should be avoided - very low capacity, is sent to the server within every browser request)
- window.name (`ContextHub.Utils.Persistence.Modes.WINDOW`)
  last resort (should be avoided as well) when other storages are not supported

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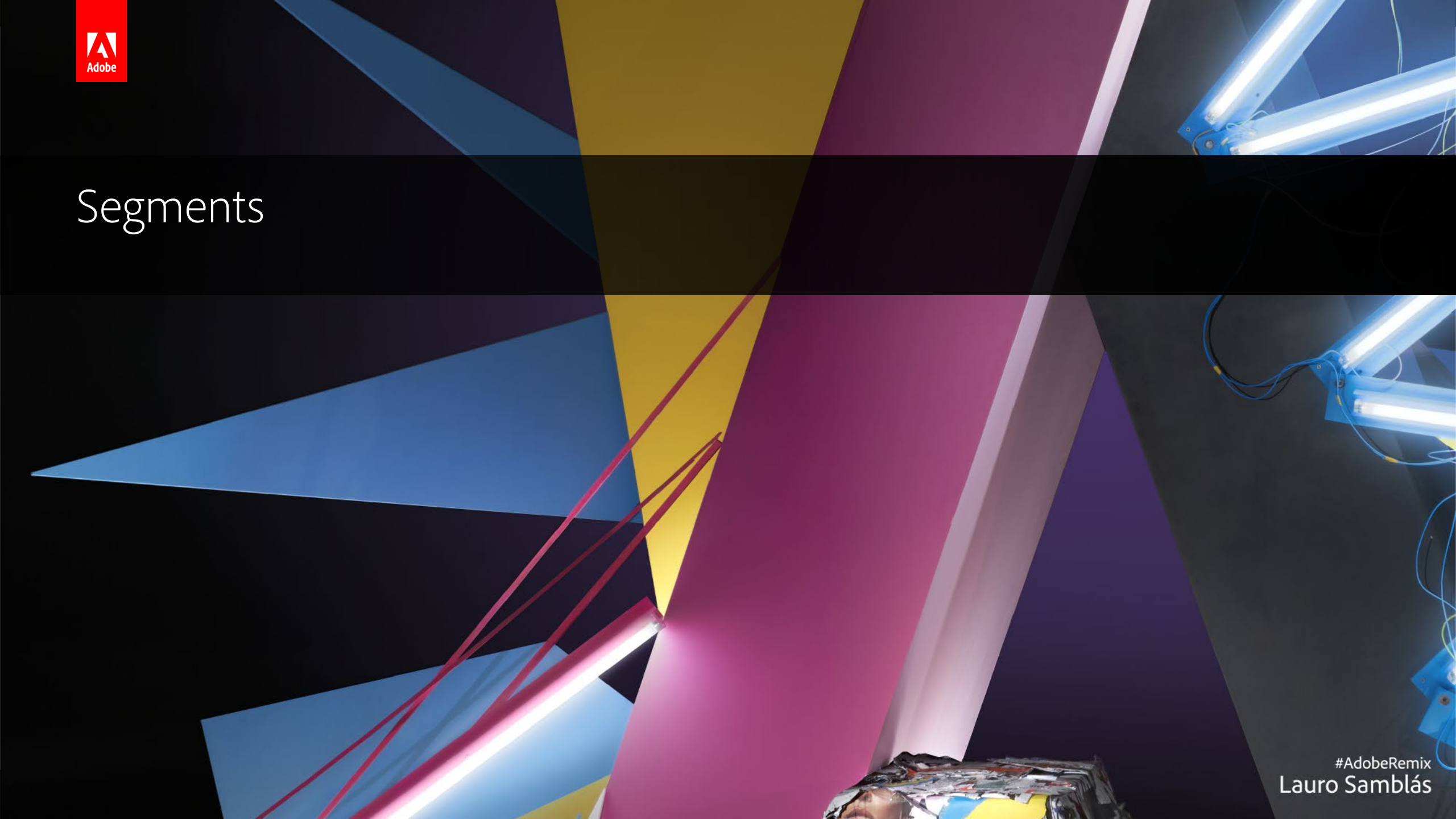
Segments



Segments

- Segments comes with specific condition that can be either true or false
- Can be used to display different variant of a teaser, depending on the resolution
- Segment Engine is triggering events when segments gets resolved / unresolved
- Segments Editor
  - `http://localhost:4502/aem/start.html` > Personalization > Audiences
  - `http://localhost:4502/libs/cq/personalization/touch-ui/content/v2/audiences.html`

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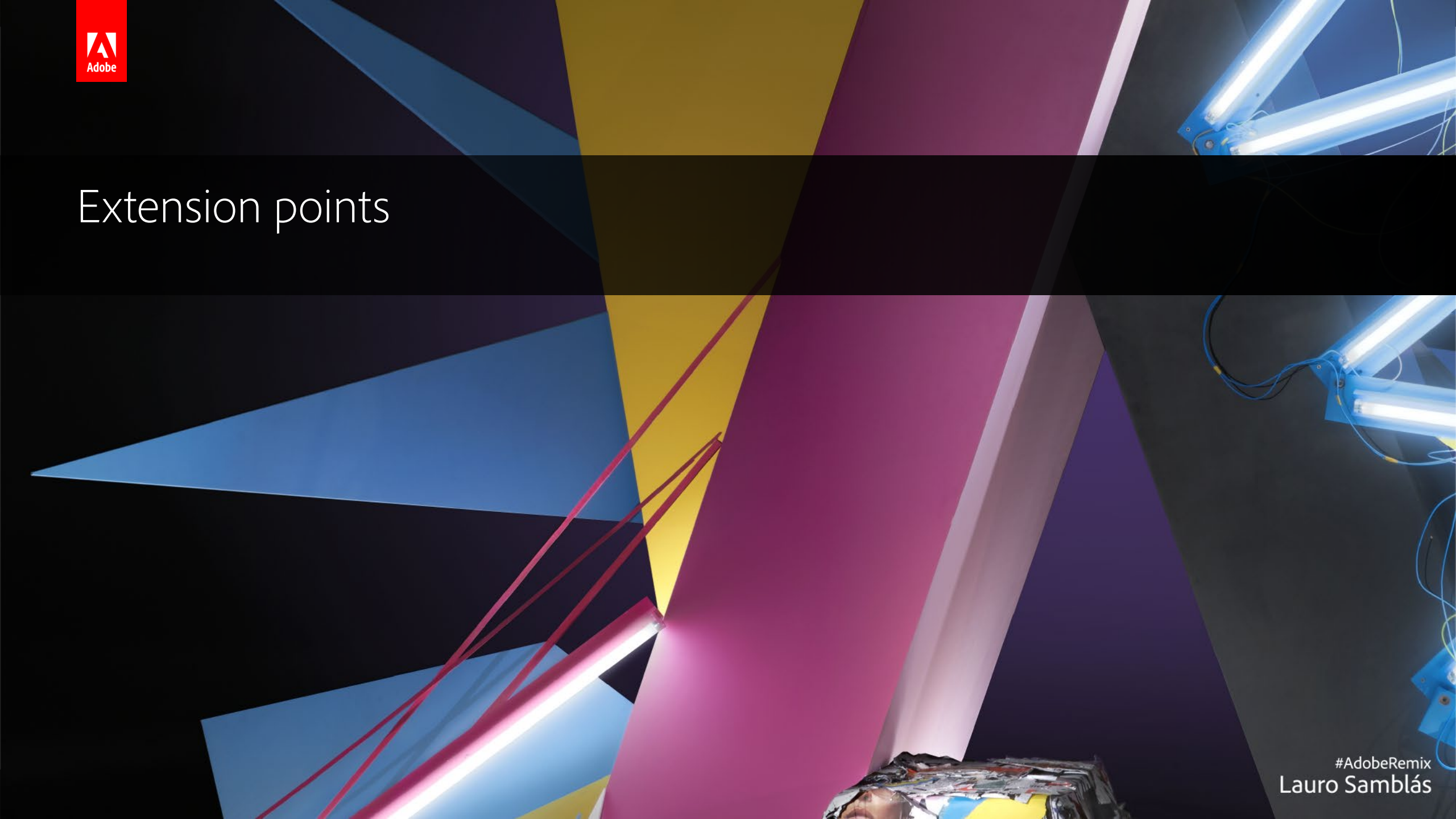
Extension points



Extension points

- `contexthub.utils`
- `contexthub.generic-stores`
- `contexthub.segment-engine.operators.custom`
- `contexthub.segment-engine.scripts.custom`

- Samples:
  - `/apps/contexthub-gems/extensions/operators`
  - `/apps/contexthub-gems/extensions/scripts`

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Demo: Custom mode, store, module

Demo: Custom mode, store, module

- Samples
  - `/apps/contexthub-gems/stores`
  - `/apps/contexthub-gems/modules`

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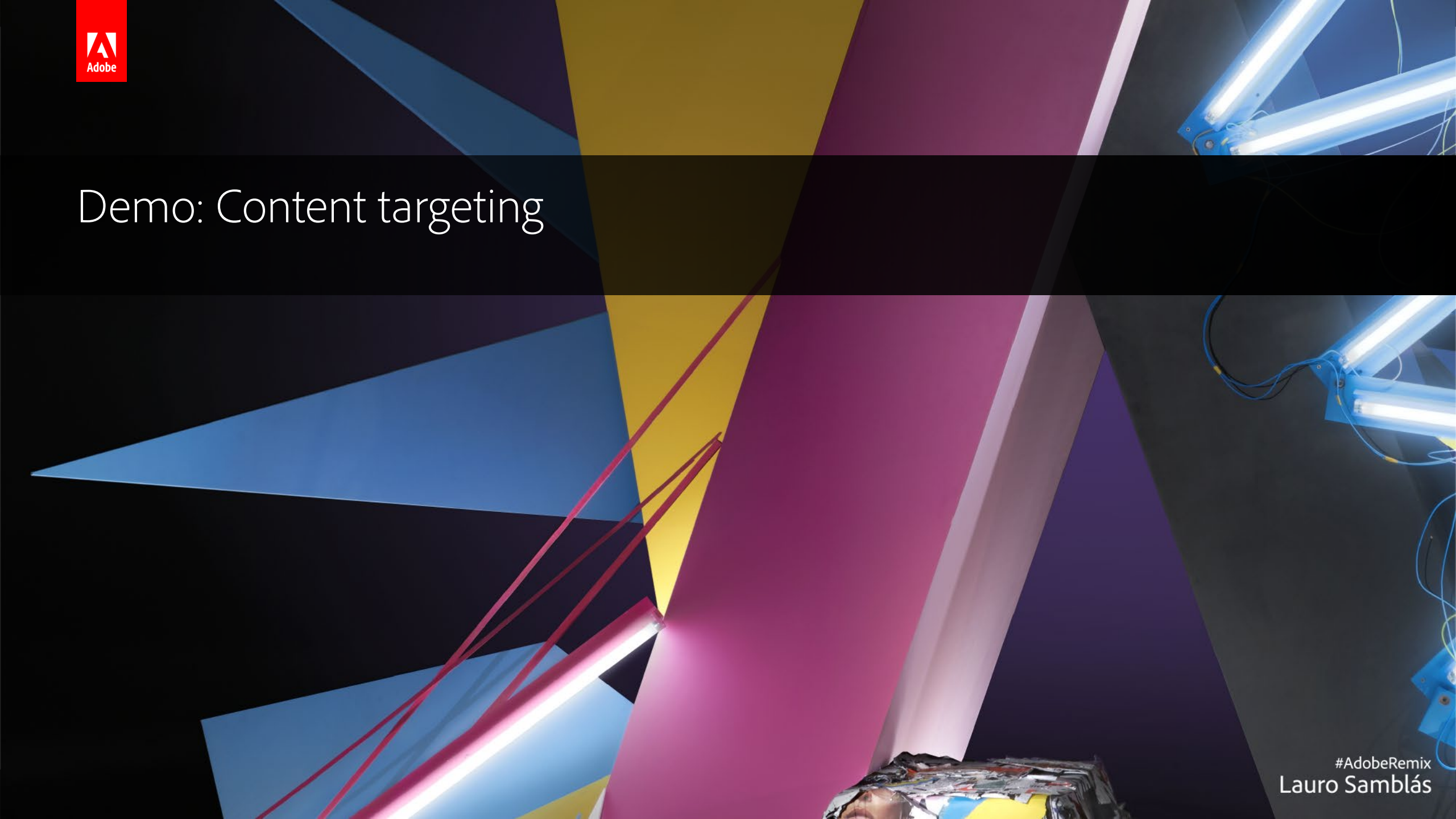
Demo: Content targeting



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Demo: Content targeting

- What we need?
  - ContextHub with specified config and segments path
  - segmentation store
  - brand, activity, segments
  - page with some components
  - targeting layer in the page editor

- Demo: `http://localhost:4502/editor.html/content/contexthub-gems/us/en.html`

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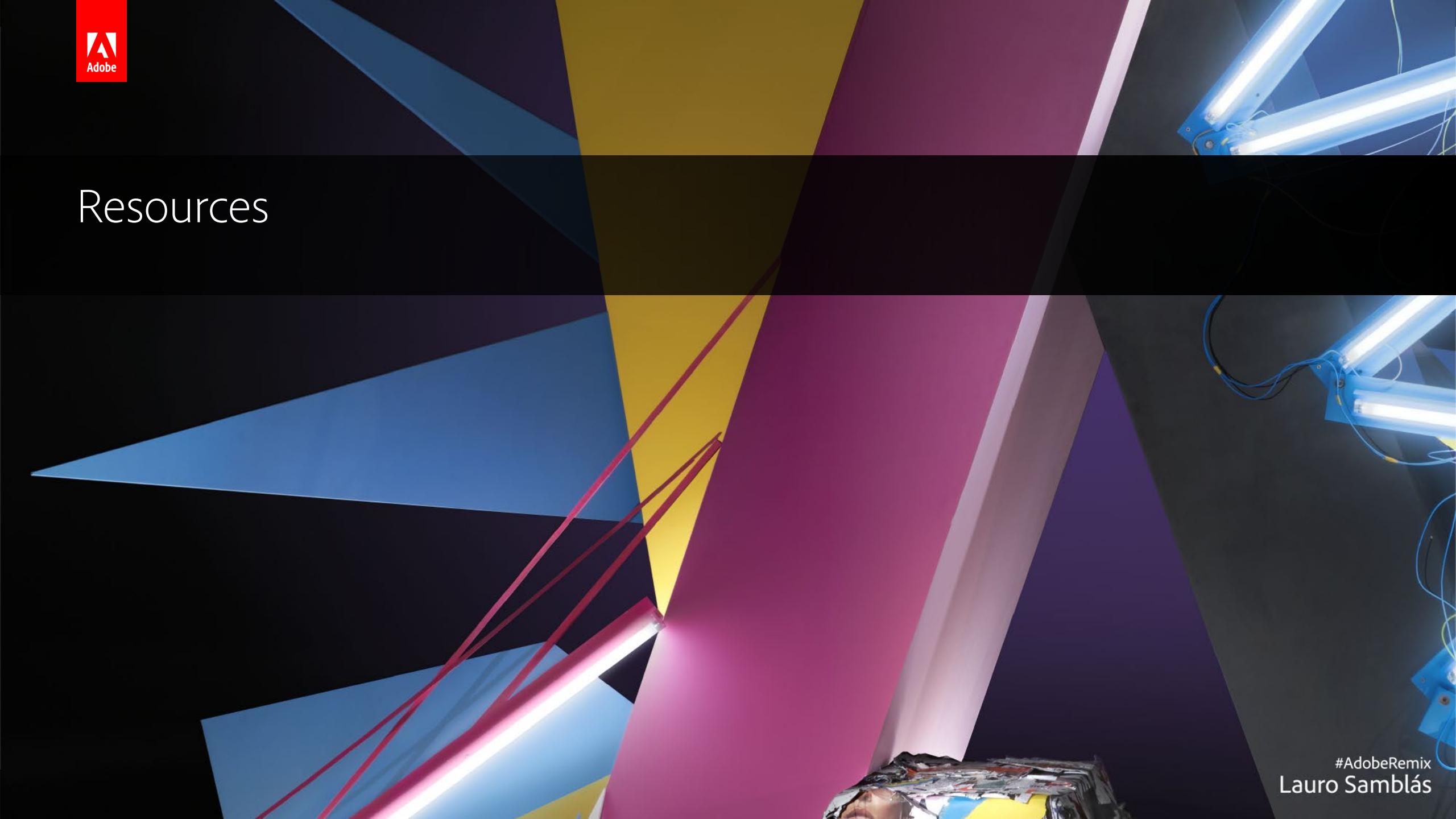
Resources



Resources

- Gems Session: Introduction to ContextHub in AEM 6.4
- Demo content-packages
- Links
  - https://helpx.adobe.com/experience-manager/6-4/sites/developing/using/contexthub.html
  - https://helpx.adobe.com/experience-manager/6-4/sites/administering/using/segmentation.html

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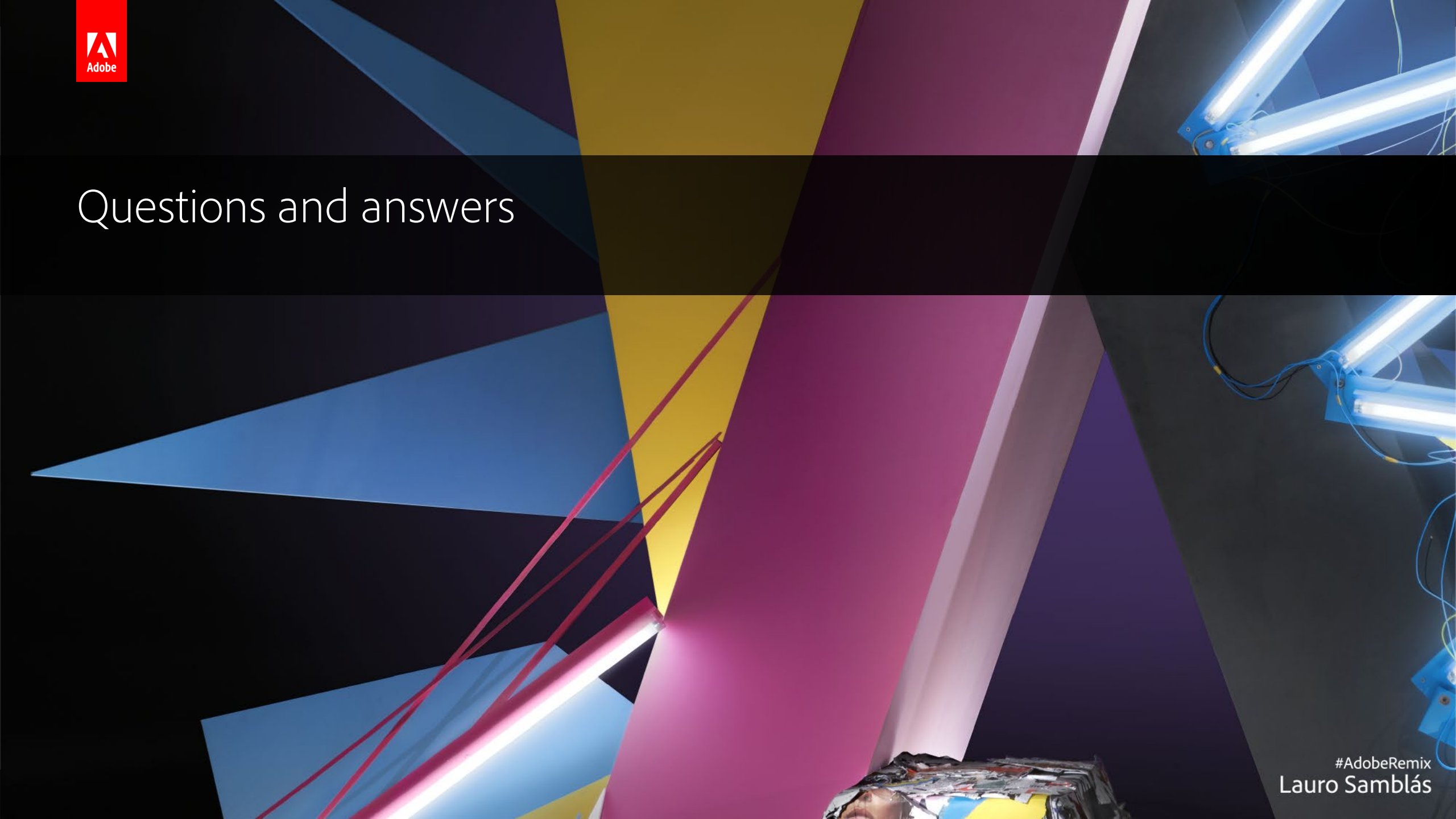
Questions and answers



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