# Customizing Touch UI Dialog Fields

CQ Gems on AEM October 7th, 2015



### Basics



### Touch-optimized UI

Next generation User Interface

Optimized for **Touch**, with Desktop in mind

B

Meant to be highly customizable

Based on Coral UI + Granite UI



### Touch-optimized UI

Next generation User Interface

Optimized for Touch, with Desktop in mind



Meant to be highly customizable

Based on Coral UI + Granite UI



### Coral UI

#### Widget library (CSS / JS)

Consistent UX across all cloud solutions





### Granite UI

#### Foundational building blocks

Coral UI markup wrapped into Sling components

Components for building UI consoles and dialogs



### Granite UI

#### Foundational building blocks

Coral UI markup wrapped into Sling components

Components for building UI consoles and dialogs



### Component Dialogs



To edit properties of an component instance

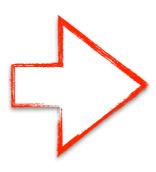


# Classic UI vs. Touch UI Dialogs



### Classic UI Dialogs





dialog node

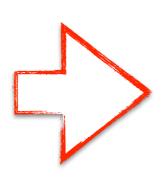
ExtJS widgets / xtypes

rendered client-side



### Classic UI Dialogs





dialog node

ExtJS widgets / xtypes

rendered client-side



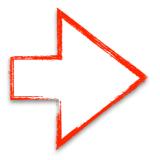
### Classic UI Dialogs



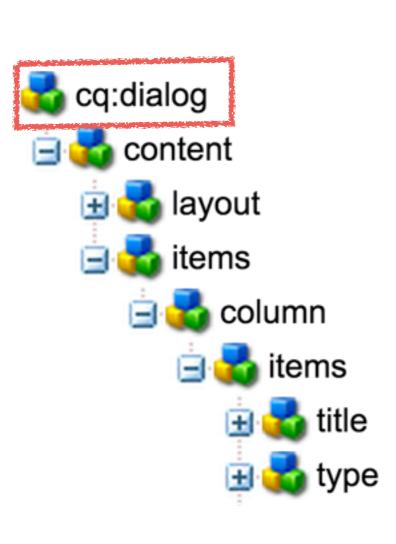


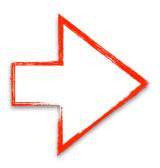
ExtJS widgets / xtypes





## Touch UI Dialogs





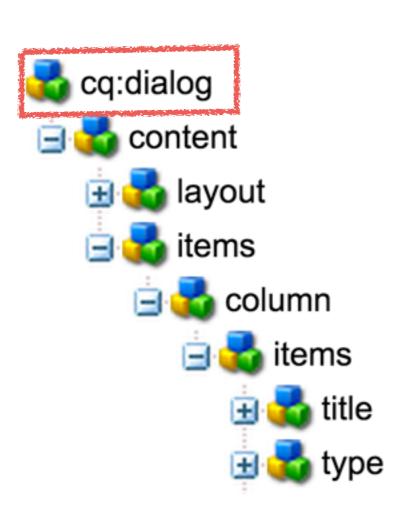
cq:dialog node

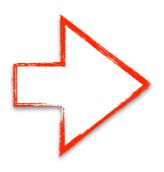
Granite UI resource types

rendered server-side



## Touch UI Dialogs





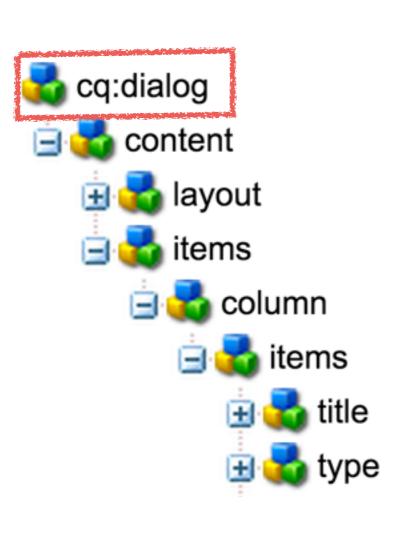
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## Touch UI Dialogs



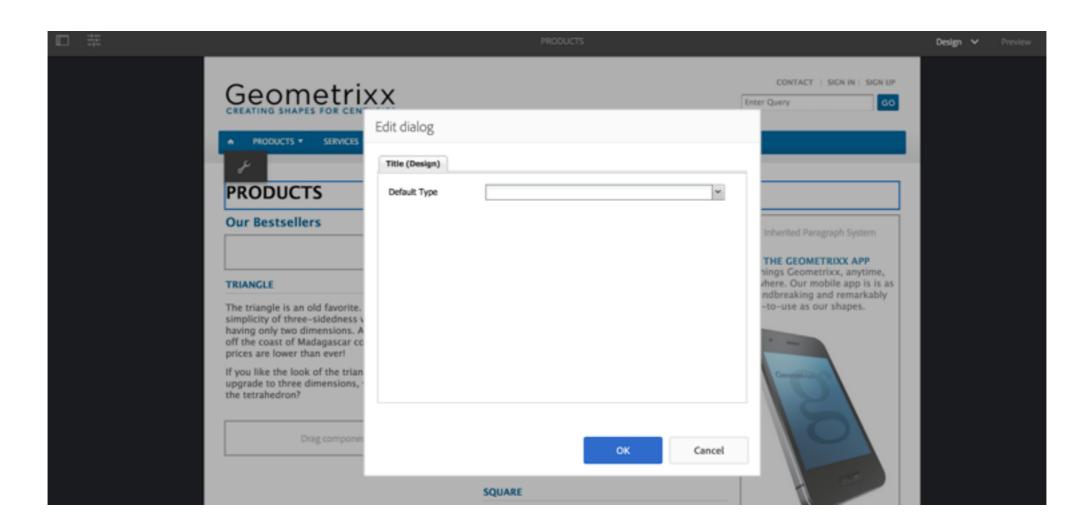
cq:dialog node

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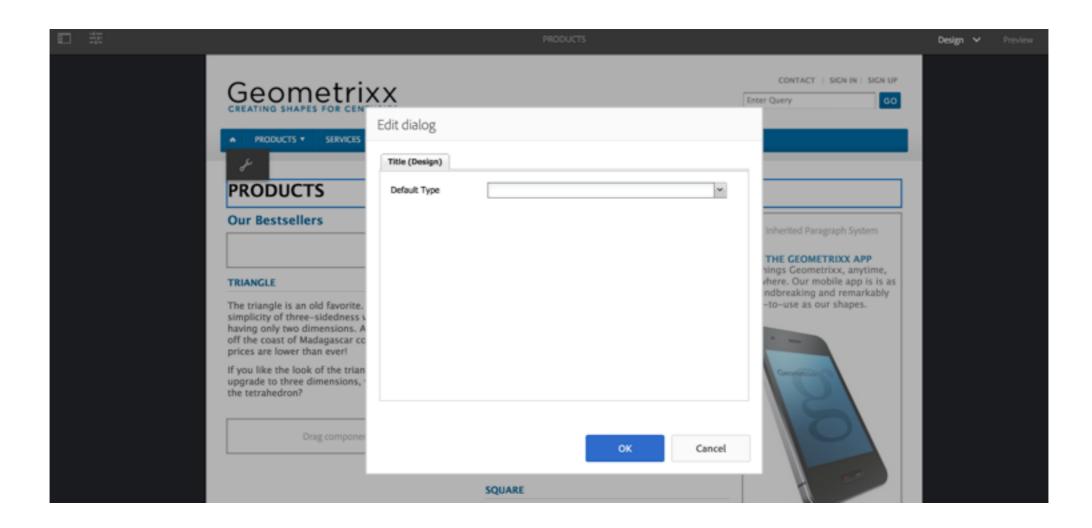
### Classic UI Dialogs in Touch UI?



Compatibility layer when no Touch UI dialog defined



### Classic UI Dialogs in Touch UI?



Migration: Dialog converter tool



### Examples

Classic UI: /libs/foundation/components/title/dialog

Touch UI: /libs/foundation/components/title/cq:dialog



# Creating custom Dialog Fields



- 0) Check granite/ui/components/foundation/form/
- 1) Create Resource type to render markup
- 2) Create Client library to define style / behavior for markup



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- 1) Resource type to render **markup** 
  - = usual component development



1) Resource type to render **markup** 

inherit from Granite UI base field

sling:resourceSuperType=
 "granite/ui/components/foundation/form/field"



1) Resource type to render **markup** 

inherit from Granite UI base field

override render.jsp



1) Resource type to render **markup** 

inherit from Granite UI base field

override render.jsp

contract: read and display **form value** from request

```
// Gives you the value of the field (read from the content)
ValueMap vm = (ValueMap) request.getAttribute(Field.class.getName());
vm.get("value", String.class);
```



### Examples

cqgems/customizingfield/components/colorpicker

granite/ui/components/foundation/form



- 2) Client library to define style / behavior
  - = usual **client library** development



2) Client library to define style / behavior

generic field? use cq.authoring.dialog as category

specific field? use extraClientLibs property on dialog



2) Client library to define style / behavior

generic field? use cq.authoring.dialog as category

specific field? use extraClientLibs property on dialog



### Example

<u>cqgems/customizingfield/components/colorpicker/clientlibs</u>



# Event handling on Dialog Fields



ExtJS listeners replacement

Listeners in custom Client library instead

Mark your custom field with CSS class



ExtJS listeners replacement (avoid listeners in content!)

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### Handling events on fields

ExtJS listeners replacement (avoid listeners in content!)

Listeners in custom Client library instead

Mark your custom field with CSS class

Hook JS event listener using that CSS class

(see <u>CoralUI documentation</u> for API / Events)



### Example

<u>cqgems/customizingfield/components/clientlibs/</u> <u>customizingfield</u>



# Validation for Dialog Fields



### Handling validation on fields

Mandatory?
set **required** property on node

Advanced validation?

set **validation** property (as a key to a registered validator) see <u>Granite UI Validation API</u> / jQuery Validator



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Mandatory?
set **required** property on node

Advanced validation?

set **validation** property (as a key to a registered validator)

use <u>Granite UI Validation API</u>



### Examples

<u>cqgems/customizingfield/components/clientlibs/customizingfield/js/validations.js</u>

<u>cq/gui/components/authoring/dialog/clientlibs/dialog/js/validations.js</u>



## Resource type is an abstraction



### Resource type is an abstraction

Resource type = **semantic intention** 

Look and feel = implementation detail

Even though the look and feel usually changes over time, the intention stays the time



### Resource type is an abstraction

Resource type = **semantic intention** 

Look and feel = implementation detail

Content structure **declares** intentions, resource type **implement** them.



### Example

<u>cqgems/customizingfield/components/colorpicker2</u>



### Summary

Classic UI / Touch UI Dialogs

Creating Fields to be used in Dialogs

Fields event handling, validation



#### Resources

Touch UI Concepts

**Granite UI Reference** 

Granite UI Form Fields Reference

**Coral UI Reference** 

