# ZK8 Shadow Components



- The shadow component which is like shadow DOM
- It neither creates a corresponding component on the server side nor a widget on the client side.
- It just injects its child components inside into current page.
- It unifies component reuse way in the previous versions
  - omacro, <include>, composition

### How it works:

- Shadow Tree at server side
   (NO widgets and DOM nodes at client side)
- Control <template> instantiation (& disposition)
- Static and Dynamic composition

```
<if test="${user.isAdmin}">...</if>
```

```
<if test="@load(vm.editable)">...</if>
```

- •<forEach>
  - oallows you to iterate over a collection of objects.
  - Specifying the collection object by the items attribute,
  - oaccess the current item by the each variable with EL.

- •<choose> <when> <otherwise>
  - oLike switch, case, default in Java
  - operforms conditional block execution by the embedded <when> tag.
  - olt renders the body of the first < when > tag whose test condition evaluates to true.

• <if>

oallows the conditional execution of its body according to the value of the *test* attribute.

```
<if test="@load(vm.isAdministrator)">
        <div>This secrete message</div>
</if>
```

### •<apply>

- oexecutable tags to allow you to choose which *template* is to be applied, it will lookup the *template* inside-out recursively.
- Insert components inside the template in the current position.
- Do not create an extra ID space and an extra <div> enclosing its child components

```
<template name="default">
    <label value="@load(title)"/>
</template>
<apply template="default" title="@load(vm.title)"/>
```

- Examples
  - opermission.zul
  - opersonList-\*.zul
  - ohierarchy.zul
    - Apply another template inside a template

### Exercise

- opersonList-2-template.zul
- opersonList-3-template-templateuri.zul
- omenu.zul