Accessibility properties

Each MX and Spark component that provides accessibility support exports accessibility information via standard ActionScript accessibility properties. For more information, see the ActionScript 3.0 API (http://help.adobe.com/en_US/FlashPlatform/reference/actionscript/3/index.html) and specifically the flash.accessibility API (http://help.adobe.com/en_US/FlashPlatform/reference/actionscript/3/flash/accessibility/package-detail.html).

The primary mechanism for defining and updating accessibility information for user interface objects is the AccessibilityProperties class, which exports basic accessibility information from Flex interface elements to assistive technologies.

Name and description

Two key properties set via an AccessibilityProperties object are name and description:

- name The accessible name property in Flex allows assistive technology to identify user interface elements. The name is the core identifying text for an element and is often set to be the label text placed near or on the element or alternative text for a visual element such as an image. Note: The value assigned to this AccessibilityProperties.name property is not the same as that assigned to an element's name property, which provides a programmatic name for the element. The AccessibilityProperties.name value should be a human readable, descriptive name. An accessible name should be concise and provide all required information for the user to identify the component. Role, state, and value information, such as the type of component (button, check box, and so on), should not be included in the accessible name. This information is exposed through the accessibility implementation associated with the component in the accessible role, state, or value methods.
- description The accessible description property (set using accessibilityProperties.description) provides supplementary detail of the component via a long form description of its use and purpose. This property is a good place to put information such as special instructions on how to interact with the component or an extended description that may be useful in understanding the component.

The accessible name and description fields can be accessed directly in ActionScript via the object. accessibleProperties.name and object.accessibleProperties.description properties. Flex 3.5 and later, however, provides convenience accessor methods for accessible MX and Spark objects directly through these properties:

mx.core.UIComponent.accessibilityName (http://help.adobe.com/en_US/FlashPlatform/reference/ actionscript/3/mx/core/UIComponent.html#accessibilityName)

mx.core.UIComponent.accessibilityDescription (http://help.adobe.com/en_US/FlashPlatform/
reference/actionscript/3/mx/core/UIComponent.html#accessibilityDescription)

In this document, these accessor methods are used whenever possible for simplicity. If an accessibilityProperties object does not exist for a component that supports it, then one will automatically be created when using these convenience methods. In addition, using these convenience methods automatically invokes the Accessibility.updateProperties() method, which then informs assistive technology to refresh any cached MSAA information. Thus, developers do not need to call Accessibility.updateProperties() when using these accessors.

In the following example, the search entry box defines an accessible name and description directly for the TextInput Spark component:

```
<s:TextInput x="36" y="28" width="252" height="21"
    accessibilityName="Search Term"
    accessibilityDescription="Results displayed below after submit."/>
<s:Button x="296" y="28"
    label="Search"/>
```

The TextInput element above defines both the accessibilityName and accessibilityDescription properties for the element. The Spark Button, however, simply defines a label attribute, and does not define