

About Composing Controls, Tag Handlers and XML Macros

When do you need your own controls? In general, there are two cases:

- You want to combine existing controls to form complex controls with a certain dedicated task. For example, you want to define an "address area" control which consists of a certain arrangement of fields and labels which form an address. These kinds of controls are called "composing controls" in this documentation - you take what is available and group it into certain units.
- You want to create new controls. For example, you need some special kind of icon with a certain behavior.

In early releases, every control consisted of the control definition (XML file) and its corresponding tag handler (Java class). In the case of a composing control, the handler class typically consists of a simple sequence of calls to the inner tag handler classes. Have a look at the source of `ADDRESSROWAREAHandler` (in the directory `<your-webapplication>/cis demos/src/com/softwareag/cis/demolibrary`). Now you do not need to provide for such a tag handler class anymore; you can now express the inner structure directly in the XML file. We call such a control an "XML macro". However, when you create new controls, you still have to provide for a corresponding tag handler in order to generate your own HTML/JavaScript code.

For short, there are two ways to build your own controls:

- You define the control in the XML file and provide for a corresponding tag handler (mandatory for new controls).
- You write an XML macro (recommended for composing controls).

The Control Editor supports both ways.