Upgrading Existing Installers from IzPack 4.x to 5.0

IzPack Maven Plugin

Release 5.0 of IzPack introduces a new implementation of the izpack-maven-plugin currently found at http://izpack.codehaus.org/izpack-maven-plugin/. In contrast to the documentation there, an explicit dependency to the izpack-standalone-compiler is no longer needed.

Please note that also the configuration parameters and their default values have drastically changed, so in case you want to port your current maven build script you should consult the mojo class from the source tree for the current paramaters until a new Maven Plugin site has been published.

IzPack XML-Schemas

> Since 5.0.0-beta11

Release 5.0 of IzPack provides an XML-Schema for each of the IzPack xml configuration files.

Specification of the schemas is currently optional; using them may require existing configuration files to be re-ordered.

The schemas are located in the izpack-dist/src/main/resources/schema/5.0/ directory.

On completion these will be published to the izpack.org website, under http://izpack.org/schema/5.0/.

To add schema validation, use the following declarations:

Installation:

```
<izpack:installation version="5.0"

xmlns:izpack="http://izpack.org/schema/installation"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://izpack.org/schema/installation
http://izpack.org/schema/5.0/izpack-installation-5.0.xsd">
```

Conditions:

```
<izpack:conditions version="5.0"

xmlns:izpack="http://izpack.org/schema/conditions"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://izpack.org/schema/conditions
http://izpack.org/schema/5.0/izpack-conditions-5.0.xsd">
```

Langpack:

```
<izpack:langpack version="5.0"

xmlns:izpack="http://izpack.org/schema/langpack"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://izpack.org/schema/langpack
http://izpack.org/schema/5.0/izpack-langpack-5.0.xsd">
```

Registry:

```
<izpack:registry version="5.0"

xmlns:izpack="http://izpack.org/schema/registry
"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-ins
tance"

xsi:schemaLocation="http://izpack.org/schema/re
gistry
http://izpack.org/schema/5.0/izpack-registry-5.
0.xsd">
```

Shortcuts:

```
<izpack:shortcuts version="5.0"

xmlns:izpack="http://izpack.org/schema/shortcut
s"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-ins
tance"

xsi:schemaLocation="http://izpack.org/schema/sh
ortcuts
http://izpack.org/schema/5.0/izpack-shortcuts-5
.0.xsd">
```

Ant Actions:

```
<izpack:antactions version="5.0"

xmlns:izpack="http://izpack.org/schema/antactions"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://izpack.org/schema/antactions
http://izpack.org/schema/5.0/izpack-antactions-5.0.xsd">
```

BSF Actions:

```
<izpack:bsfactions version="5.0"

xmlns:izpack="http://izpack.org/schema/bsfactions"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://izpack.org/schema/bsfactions
http://izpack.org/schema/5.0/izpack-bsfactions-5.0.xsd">
```

Icons:

```
<izpack:icons version="5.0"

xmlns:izpack="http://izpack.org/schema/icons"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://izpack.org/schema/icons
http://izpack.org/schema/5.0/izpack-icons-5.0.xsd">
```

Configuration Actions:

```
<izpack:configurationactions version="5.0"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns:izpack="http://izpack.org/schema/configurationactions"

xsi:schemaLocation="http://izpack.org/schema/configurationactions
http://izpack.org/schema/5.0/izpack-configurationactions-5.0.xsd">
```

User Input

```
<izpack:userinput version="5.0"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns:izpack="http://izpack.org/schema/userinput"

xsi:schemaLocation="http://izpack.org/schema/userinput
http://izpack.org/schema/5.0/izpack-userinput-5.0.xsd">
```

Processing

```
<izpack:processing version="5.0"

xmlns:izpack="http://izpack.org/schema/processing"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://izpack.org/schema/processing
http://izpack.org/schema/5.0/izpack-processing-5.0.xsd">
```

Compilation

```
<izpack:compilation version="5.0"

xmlns:izpack="http://izpack.org/schema/compilat
ion"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-ins
tance"

xsi:schemaLocation="http://izpack.org/schema/co
mpilation
http://izpack.org/schema/5.0/izpack-compilation
-5.0.xsd">
```

Upgrading Installation Descriptors (install.xml)

IzPack installation files try to preserve backwards compatibility as much as possible yet version 5.0 introduced some incompatible changes - mostly for consistency:

Native elements

The `<native>` elements must now be contained in a `<natives>` wrapping element under 5.0. See the section on Native Libraries.

> **Avoid using the <natives> element with 4.3**
>
> The IzPack installer will silently ignore the `<native>` tags contained inside a `<natives>` eleme nt but does not throw an error when you use your 5.0 installer file with version 4.3.x.

Panel action param elements

> Since 5.0.0-beta11

The optional `<param>` element in a panel `<action>` element now uses `name` and `value` attributes instead of `key` and `value` child elements. The following examples illustrate the change between the two versions.

Using RegistryWriterAction under IzPack 4.3.x

```
<panel classname="TargetPanel"
id="target.win">
  <os family="windows" />
  <actions>
    <action stage="preactivate"
classname="com.opentext.installer.actions.Re
gistryReaderAction">
      <param>
        <key>ConfigurationFile</key>

<value>RegistryReaderConfiguration.xml</valu
e>
      </param>
    </action>
  </actions>
</panel>
```

Using RegistryWriterAction under IzPack 5.0

```
<panel classname="TargetPanel"
id="target.win">
  <os family="windows" />
  <actions>
    <action stage="preactivate"
classname="com.opentext.installer.actions.Re
gistryReaderAction">
      <param name="ConfigurationFile"
value="RegistryReaderConfiguration.xml"/>
    </action>
  </actions>
</panel>
```

See the section on Panel Actions.

Panel configuration param elements

> Since 5.0.0-beta11

The optional `<configuration>` section in a `<panel>` element permits nested `<param>` elements. Previously, the `<param>` element was specified using child elements `<key>` and `<value>`. This has now been changed to `name` a nd `value` attributes - see *Panel action param elements*, above, and the Panels section.

LateShortcutInstallListener

> Since 5.0.0-beta11

Change To packselection Condition

Due to refactoring and improvement to the internal workings of IzPack, `LateShortcutInstallListener` is no longer available. Instead, use the new `<lateShortc utInstall/>` option in `shortcutSpec.xml`. See Shortcut Specification for details.

> Since 5.0.0-beta11

In 4.3.x, the **packselection** condition erroneously required that a packid element be provided indicating the pack id.

E.g.:

```
   <condition type="packselection"
id="packselection1">
        <packid>myPackId</pack>
   </condition>
```

The **packid** actually refers to the localisation identifier of the pack, which is optional, and non-unique. It should refer to the pack name attribute.

To better reflect this, and to force those upgrading to use the correct attribute,the **<packid>** element has been changed to **<name>** E.g.

```
   <condition type="packselection"
id="packselection1">
        <name>Core</name>
   </condition>
```

See IZPACK-799 for more details.

CompilePanel.Spec.xml

> Since 5.0.0-beta11

The misspelt **packdepency** element has been renamed to **packdependency.**

Default installation directories in TargetPanel.dir.*

IZPACK-798 changed TargetPanel.dir.* etc to be variables, rather than resources.

In 4.3.5, the default directory displayed in TargetPanel may be configured in a text file named:

- TargetPanel.dir.<os name>
- TargetPanel.dir

In the <os name> form, the os name has been one of:

- System.getProperty("os.name").replace(' ', '_')
- "windows"
- "mac"
- "unix"

For 4.3.6, IZPACK-798 changed the above to use variables instead of text files, following the same naming convention.
For 5.0, the Platform class is used to determine the appropriate variable (see IZPACK-829).

For a more details, see Setting Default Installation Directories.

UserInputPanel

The `panel.id` attribute is necessary to have here, for example:

install.xml

```
<panels>
    ...
  <panel classname="UserInputPanel"
id="container.installation.selection.panel"/
>
  <panel classname="UserInputPanel"
id="new.container.path.selection.panel"
condition="new.container"/>
  <panel classname="UserInputPanel"
id="existing.container.path.selection.panel"
condition="existing.container"/>
    ...
</panels>
```

The userInputSpec.xml must also contain the panel.id attribute and referred panel IDs from the installation descriptors must exist in the user input panel definitions.

Example:

userInputSpec.xml

```
<userInput>
  <panel
id="container.installation.selection.panel">
    ...
  </panel>

  <panel
id="new.container.path.selection.panel">
    ...
  </panel>

  <panel
id="existing.container.path.selection.panel"
>
    ...
  </panel>
  ...
</userInput>
```

The panel.order attribute has been removed from the userInputSpec.xml, since it has been ambigous, see IZPACK-885.