Process for Publishing a FHIR Implementation Guide (for non-HL7 IGs)

This process describes a way to process the IG in a way that it is ready for publication on a website, with resolvable references.

1. Prepare the environment

1. Create a folder for your implementation guide publication (all releases of the IG will be in added to that folder, and the folder can be updated to the web server)
   - e.g. Publication
2. Download the publisher jar to this folder
3. Clone the history template to a folder called fhir-ig-history-template in this folder (or add it as a submodule if you want)

   ```
   git clone https://github.com/HL7/fhir-ig-history-template.git fhir-ig-history-template
   ```

   You can use other history templates:

   ```
   git clone https://github.com/HL7/fhir-ig-history-template.git fhir-ig-history-template
   git clone https://github.com/openhie/fhir-ig-history-template.git fhir-ig-history-template
   git clone https://github.com/IHE/fhir-ig-history-template.git fhir-ig-history-template (soon)
   ```

4. Add the registry (clone or submodule) submodule to a folder called ig-registry

   ```
   git clone https://github.com/FHIR/ig-registry.git
   ```

5. Copy the IG root folder to a folder called {ig-root} e.g. my-ig under this working folder
6. Change the working folder to the IG root folder

   ```
   example: cd my-ig
   ```

7. Create a folder that will be your web root (typically the folder that you will publish to the web)

   ```
   example: md www
   ```

8. Copy history template to web root folder

   ```
   example: xcopy /s /y ../fhir-ig-history-template/* www
   ```

9. Create a publish.ini in the webroot folder, like this:

   ```
   [website]
   style=fhir.layout
   server=apache
   url= http://openhie.org/fhir/hiv-casereporting
   org=HIE
   no-registry=1
   
   [feeds]
   package=package-feed.xml
   publication=publication-feed.xml
   ```

   Note: the url must be same as the IG’s canonical URL

2. Setup the IG for publication

1. Change or retain these parameters from the ImplementationGuide:
1. Check the ig filename. Best if it is {ig_id}.json / {ig_id}.xml
2. Run the publisher to make sure everything is ok:
   ```java -jar ../publisher.jar -ig ig.ini``
3. Create a file called package-list.json in the webroot folder. First, it only includes the current version for CI-build
   ```
   {
     "package-id": "{ig_package_id}",
     "title": "HIV Case Reporting and Monitoring",
     "canonical": "{canonical}",
     "introduction": "**HIV Case Reporting and Monitoring** Implementation Guide",
     "category": "Research",
     "list": [
       {
         "version": "current",
         "desc": "Continuous Integration Build",
         "status": "ci-build",
         "current": true
       }
     ]
   }
   ```
   Note:
   * {canonical} = {base}/[ig-id] e.g. http://openhie.org/fhir/hiv-cr
   * make sure there is a category

3. Add a new release (run this for every new release)

1. Check and/or change these IG parameters:
   • {ig_version}: ImplementationGuide.version: e.g. 0.1.0
   • {ig_status}: ImplementationGuide.status: e.g. draft
   • {ig_fhir_version}: ImplementationGuide.fhirVersion: e.g. 4.0.1
2. Retain these, do not change:
   • {ig_id}: ImplementationGuide.id: e.g. hiv-casereporting
   • {ig_url}: ImplementationGuide.url: e.g. http://openhie.org/fhir/hiv-casereporting
   • {ig_package_id}: ImplementationGuide.packageId: e.g. ohie.fhir.hiv
3. Define the following for the new release:
   • {ig_id}: the IG id, must be the same as {ig_version}
   • {rel_version}: the version of the IG, must be the same as {ig_version}
   • {rel_fhir_version}: the version of the IG, must be the same as {ig_fhir_version}
   • {rel_status}: the publication status (see valueset above)
   • {rel_desc}: the description of this release
   • {rel_date}: the date of this release
4. Run the publisher to make sure everything is ok:
   ```java -jar ../publisher.jar -ig ig.ini```
5. Run the publisher with the -publish option and the url for the version:
6. Add a list entry to package-list.json:

```json
{
   "version": "{ig_version}",
   "date": "{rel-date}",
   "desc": "{rel-desc}",
   "path": "{canonical}/ig_{version}",
   "status": "{rel-status}",
   "sequence": "{sequence Group, e.g. DSTU, Main... }",
   "current": true,
   "fhir_version": "{rel_fhir_version}",
   "changes": "optional link to page describing changes"
}
```

Example:

```json
{
   "version": "0.2.0",
   "date": "2021-03-19",
   "desc": "HIV Case Reporting - Release 0.2.0",
   "path": "http://openhie.org/fhir/hiv-casereporting/0.2.0",
   "status": "trial-use",
   "sequence": "Trial Use 2",
   "fhirversion": "4.0.1",
   "current": true
}
```

(Notes: besides the ci-build entry, only another release can have "current": true)

7. Copy the output content to the web root folder:

```shell
xcopy /s /y output www
```

8. Also copy the content of the output to a folder named after the release:

```shell
xcopy /s /y output {webroot}/ig_{version}/
excopy /s /y output www/0.2.0/
```

9. Run the publisher in update mode for the webroot folder:

```shell
java -jar ..\publisher.jar -publish-update -folder {webroot} -registry ..\ig-registry\fhir-ig-list.json -history ..\fhir-ig-history-template
e.g.
java -jar ..\publisher.jar -publish-update -folder www -registry ..\ig-registry\fhir-ig-list.json -history ..\fhir-ig-history-template
```

10. That should do it. You should now have in your www folder the ig content, and on side it one folder for each release (e.g., /0.1.0, /0.2.0). In the root folder you should also have the history folder which would look like this (besides the template, of course)

a. If you have a history template, you can copy the template's style files to the history assets

```shell
xcopy /s /y {webroot}\assets <webroot>\assets-hist
e.g.
xcopy /s /y www\assets www\assets-hist
```
### Publication (Version) History

The following versions of the HIV Case Reporting and Monitoring have been published:

<table>
<thead>
<tr>
<th>Date</th>
<th>IG Version</th>
<th>FHIR Version</th>
<th>Description</th>
<th>Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021-03-21</td>
<td>0.2.1</td>
<td>4.0.1</td>
<td>HIV Case Reporting and Monitoring - Release 0.2.1</td>
<td><img src="#" alt="Link" /></td>
</tr>
<tr>
<td>(current)</td>
<td>(old current)</td>
<td>Continuous Integration Build</td>
<td><img src="#" alt="Link" /></td>
<td></td>
</tr>
<tr>
<td>2021-03-21</td>
<td>0.2.1</td>
<td>4.0.1</td>
<td>HIV Case Reporting and Monitoring - Release 0.2.1 (Permanent Home)</td>
<td><img src="#" alt="Link" /></td>
</tr>
</tbody>
</table>