

Servlet API Library

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This module (`isis-module-servletapi`) provides access to various elements of the Servlet API, namely the `ServletContext`, the `HttpServletRequest` and the `HttpServletResponse`.

For each of these APIs a corresponding "provider" domain service exists; for example `ServletContextProvider` service provides access to the `ServletContext`.

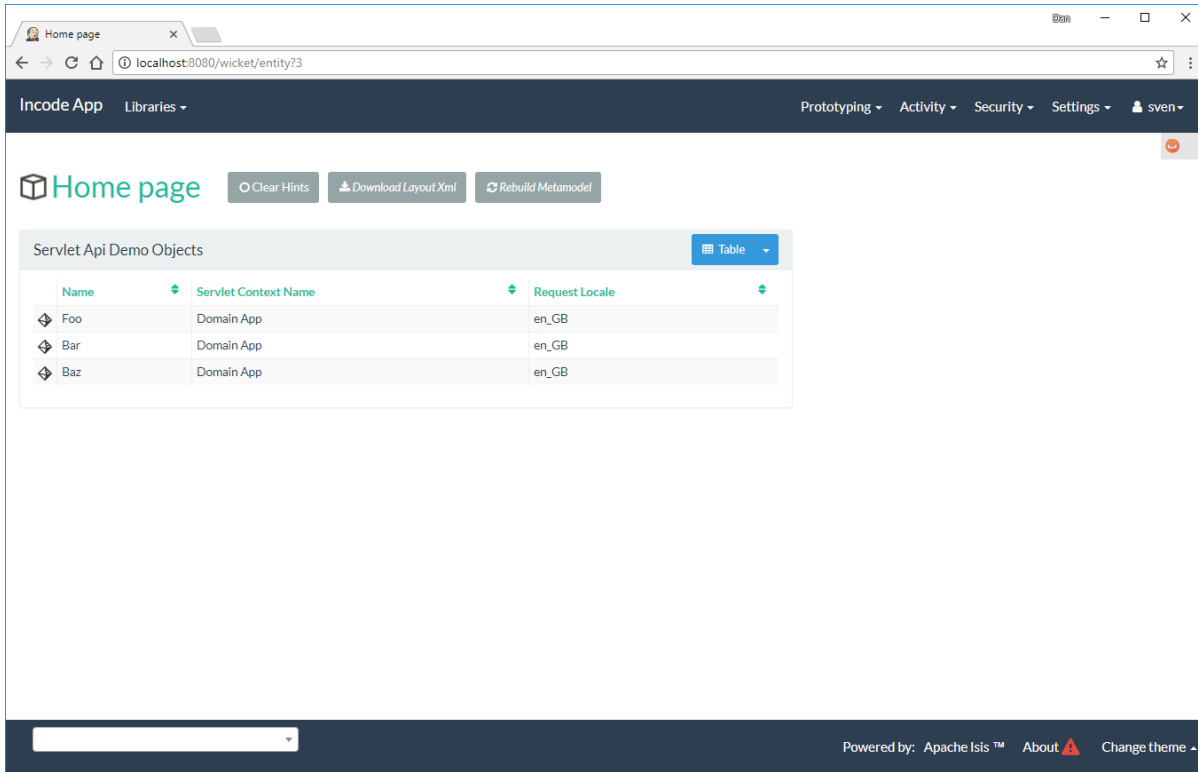


This module is only available for Wicket viewer, not the REST API.

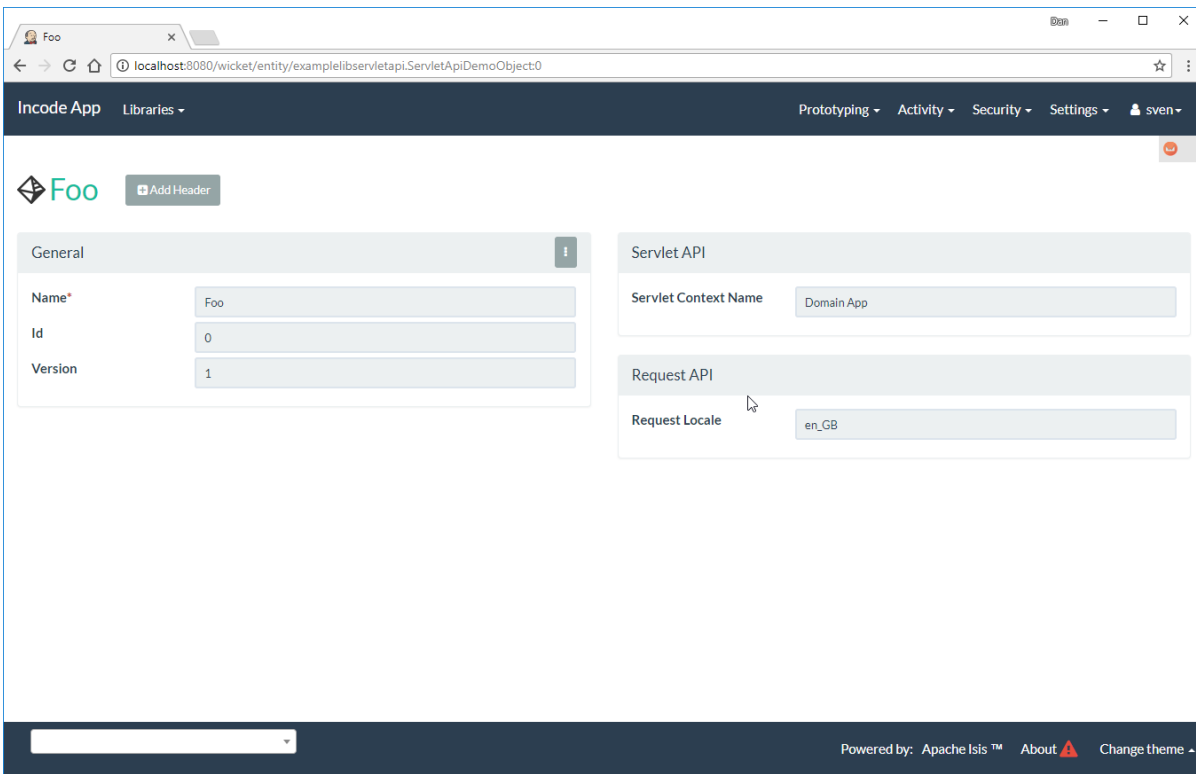
Screenshots

The module's functionality can be explored by running the [quickstart with example usage](#) using the `org.incode.domainapp.example.app.modules.ExampleDomLibServletApiAppManifest`.

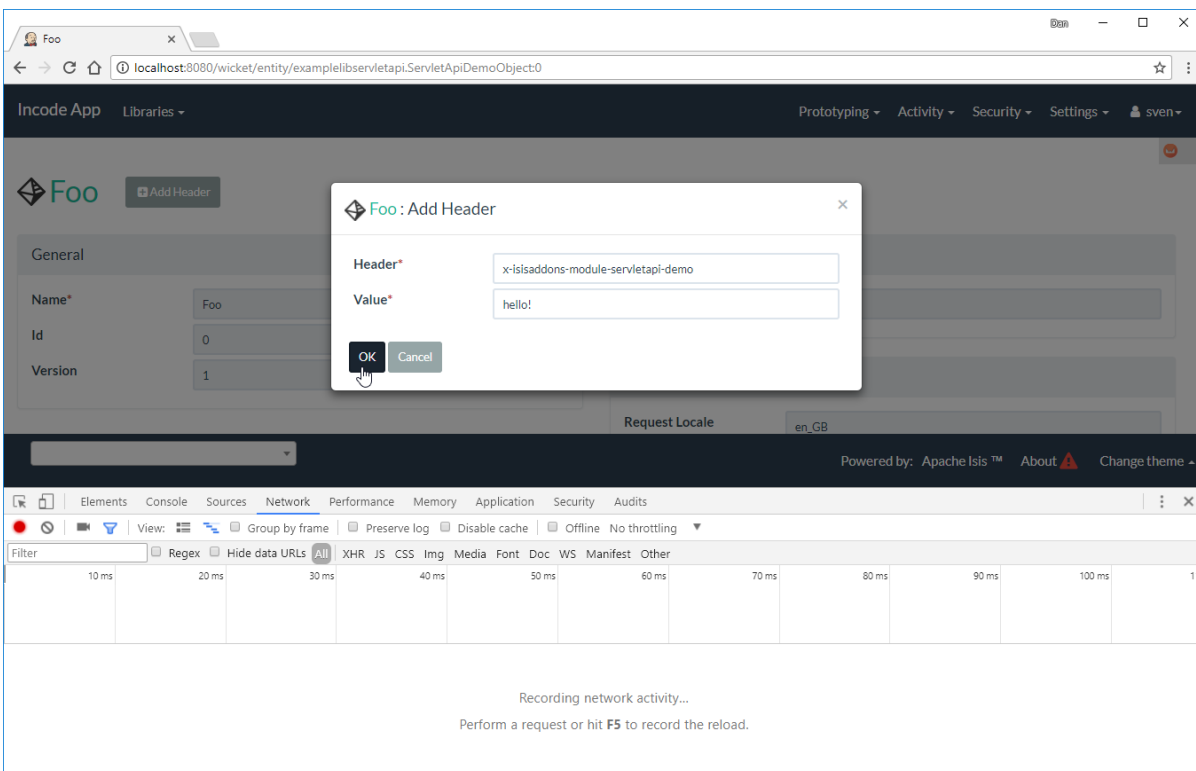
A home page is displayed when the app is run:



The demo object has all of the various "provider" domain services injected into it. It uses the `ServletContextProvider` and the `HttpServletRequestProvider` services to simply show the servlet context name and user's locale:



To demonstrate the use of the `HttpServletResponseProvider`, the demo object provides an "addHeader" action:



When invoked, this adds a HTTP header to the response:

Screenshot of Incode App interface showing a web browser window and a network debugging tool. The browser address bar shows `localhost:8080/wicket/entity/examplelibservletapi.ServletApiDemoObject:0`. The Incode App header includes "Prototyping", "Activity", "Security", "Settings", and "sven". The main content area displays "General" and "Servlet API" tabs. Below the browser, a network debugging tool is open, showing a list of requests and a detailed view of a selected request.

The network tool interface includes a toolbar with options like "View", "Group by frame", "Preserve log", "Disable cache", and "Offline". A filter is set to "All". A timeline shows request durations from 20 ms to 320 ms. The selected request is:

- Name: `examplelibservletapi.ServletApiDemoObject:074-1.1B...ModalWindow-content-parameters-inputForm-okButton`
- Request Method: POST
- Status Code: 200 OK
- Remote Address: `:::1:8080`
- Referrer Policy: `no-referrer-when-downgrade`

The response headers are:

- Cache-Control: `no-cache, no-store`
- Content-Type: `text/xml;charset=utf-8`
- Date: `Fri, 08 Sep 2017 06:39:32 GMT`
- Expires: `Thu, 01 Jan 1970 00:00:00 GMT`
- Pragma: `no-cache`
- Server: `Jetty(9.4.3.v20170317)`
- Transfer-Encoding: `chunked`
- x-isisaddons-module-servletapi-demo: `hello!`

The request headers section is currently collapsed. The bottom status bar indicates "4 requests | 74.0 KB transferred".

How to configure/use

Classpath

Update your classpath by adding this dependency in your `dom` project's `pom.xml`:

```
<dependency>
  <groupId>org.isisaddons.module.servletapi</groupId>
  <artifactId>isis-module-servletapi-dom</artifactId>
</dependency>
```

Check for later releases by searching [Maven Central Repo](#).

Bootstrapping

In the `AppManifest`, update its `getModules()` method, eg:

```
@Override
public List<Class<?>> getModules() {
    return Arrays.asList(
        ...
        org.isisaddons.module.servletapi.ServletApiModule.class,
        ...
    );
}
```

API & Implementation

The `ServletContextProvider` defines the following API:

```
public class ServletContextProvider {
    public ServletContext getServletContext() { ... }
}
```

The `HttpServletRequestProvider` defines the following API:

```
public class HttpServletRequestProvider {
    public HttpServletRequest getHttpServletRequest() { ... }
}
```

The `HttpServletResponseProvider` defines the following API:

```
public class HttpServletResponseProvider {
    public HttpServletResponse getHttpServletResponse() { ... }
}
```

And finally, the `HttpSessionProvider` defines the following API:

```
@DomainService(nature = NatureOfService.DOMAIN)
public class HttpSessionProvider {
    public Optional<HttpSession> getHttpSession() { ... }
    public <T> Optional<T> getAttribute(String key, Class<T> clazz) { ... } ①
    public <T> void setAttribute(String key, T value) { ... }
    public void removeAttribute(String key) { ... }
}
```

① obtains an attribute (previous set) by key, cast to the specified class

These actions are all programmatic and do not appear in the UI.

Known issues

None known at this time.

Dependencies

Maven can report modules dependencies using:

```
mvn dependency:list -o -pl modules/lib/servletapi/impl -D excludeTransitive=true
```

which, excluding Apache Isis itself, returns these compile/runtime dependencies:

```
org.apache.geronimo.specs:geronimo-servlet_3.0_spec:jar:1.0  
org.apache.wicket:wicket-core:jar:7.8.0
```

The direct Wicket dependency is because the module implementation depends on Apache Isis, and in particular on Apache Isis' Wicket viewer. This means that it cannot be used within domain objects invoked from the REST API (Restful Objects viewer).

For further details on 3rd-party dependencies, see:

- [Apache Wicket](#)