

# **Table of Contents**

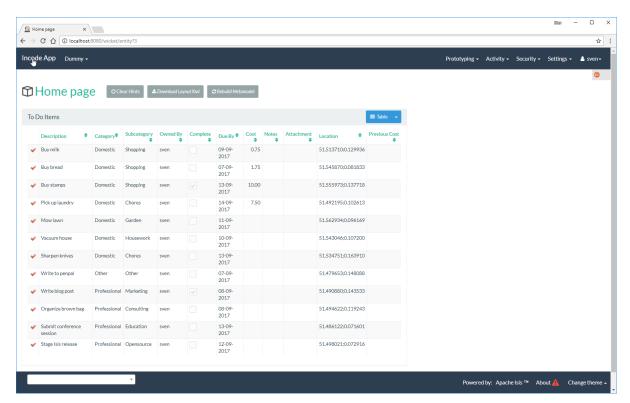
Screenshots	
Parented collection as calendar	2
Drill down	
Standalone collection as calendar	4
Calendars	5
API & Usage	
CalendarEventable`interface	
Calendarable interface	8
CalendarableDereferencingService	
CalendarableDereferencingService	
Classpath	
Known issues	10
Dependencies	

This component (isis-wicket-fullcalendar2) renders events for a collection of entities within a fullpage calendar. Underneath the covers it uses this fullcalendar widget.

## **Screenshots**

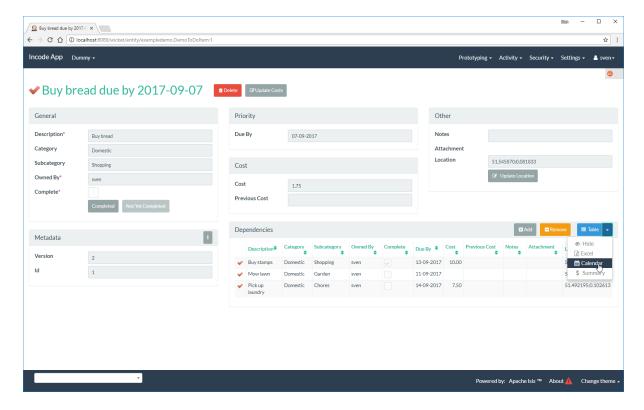
The module's functionality can be explored by running the quickstart with example usage using the org.incode.domainapp.example.app.modules.ExampleDomWktFullCalendar2AppManifest.

A home page is displayed when the app is run:

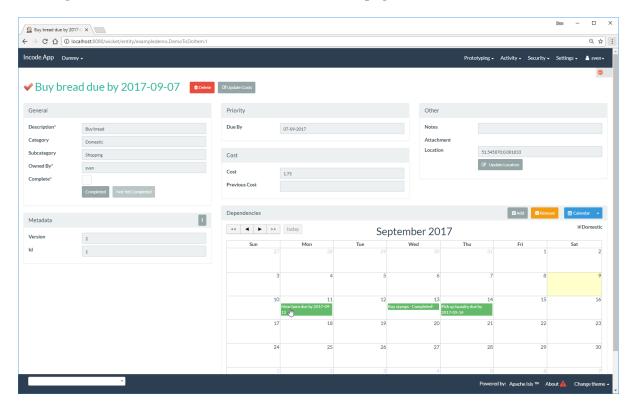


### Parented collection as calendar

The todo item's collection contains a list of Calendarable entities (also todo items); this is indicated through a button to switch the view:

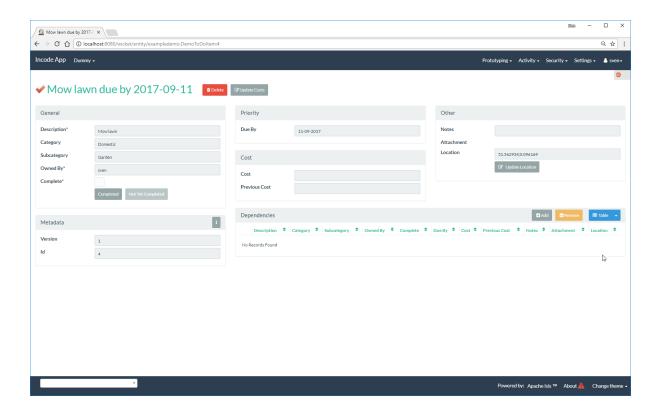


Clicking the button shows the same entities on a fullpage calendar:



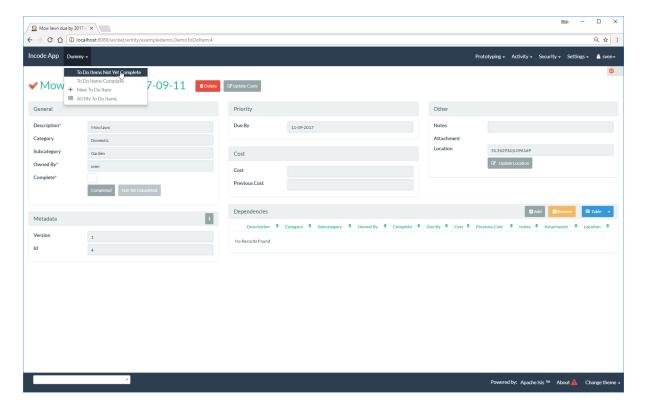
## **Drill down**

Clicking on the event in the calendar drills down to the corresponding entity:

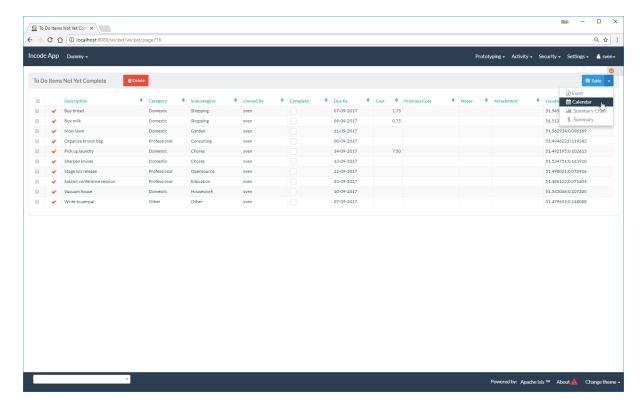


## Standalone collection as calendar

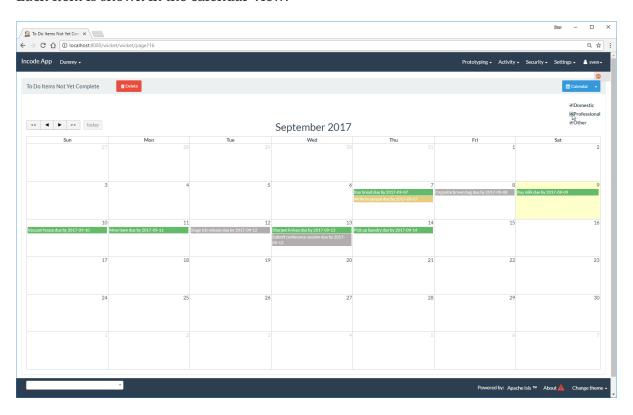
Invoking an action that returns a list of Calendarable entities:



... also results in the button to view in a fullpage calendar:



Each item is shown in the calendar view:

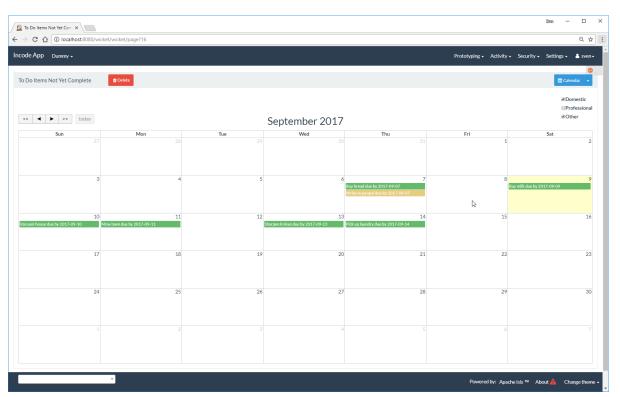


## **Calendars**

Each entity can provides dates to either a single calendar or to multiple calendars. In the example app each todo item exposes its dueBy date to a single calendar, named after its category:

```
@Programmatic
@Override
public String getCalendarName() {
    return getCategory().name();
}
@Programmatic
@Override
public CalendarEvent toCalendarEvent() {
    if(getDueBy() == null) {
        return null;
    }
    return new CalendarEvent(getDueBy().toDateTimeAtStartOfDay(), getCalendarName(), container.titleOf(this));
}
```

The full page calendar uses colour coding to indicate the calendars, as well as checkboxes to show/hide each calendar. Unchecking the calendar toggle hides all events in that calendar:



## **API & Usage**

Each entity must implement either the Calendar Eventable interface or the Calendar able interface:

## CalendarEventable`interface

Of the two interfaces, CalendarEventable interface is the simpler, allowing the object to return a single CalendarEvent:

- ① groups similar events together; in the UI these correspond to checkboxes rendered near the top.
- 2 returns a Calendar Event value type representing the data to be rendered on the calender.

#### Calendar Event itself is:

```
public class CalendarEvent implements Serializable {
    private final DateTime dateTime;
    private final String calendarName;
    private final String title;
    private final String notes;
    public CalendarEvent(
            final DateTime dateTime,
            final String calendarName,
            final String title) {
        this(dateTime, calendarName, title, null);
    }
    public CalendarEvent(
            final DateTime dateTime,
            final String calendarName,
            final String title,
            final String notes) {
        this.dateTime = dateTime;
        this.calendarName = calendarName;
        this.title = title;
       this.notes = notes;
    }
}
```

In the demo app, the ToDoItem implements Calendar Eventable.

### Calendarable interface

While the CalendarEventable interface will fit many requirements, sometimes an object will have several dates associated with it. For example, one could imagine an object with start/stop dates, or optionExercise/optionExpiry dates.

The Calendarable interface therefore allows the object to return a number of CalenderEvents; each is qualified (identified) by a calendarName:

```
public interface Calendarable {
    Set<String> getCalendarNames();
    ImmutableMap<String, CalendarEventable> getCalendarEvents();
}
```

## CalendarableDereferencingService

Sometimes the domain object that implements Calendarable or CalendarEventable will be a supporting object such as a Note attached to an Order, say. When the marker is clicked in the calendar, we would rather that the UI opens up the Order rather than the associated Note (in other words, saving a click).

This requirement is supported by providing an implementation of the CalendarableDereferencingService:

```
public interface CalendarableDereferencingService {
    @Programmatic
    Object dereference(final Object calendarableOrCalendarEventable);
}
```

for example, one might have:

```
public class LocationDereferencingServiceForNote implements
CalendarableDereferencingService {
    @Programmatic
    public Object dereference(final Object calendarableOrCalendarEventable) {
        if (!(locatable instanceof Note)) {
            return null;
        }
        final Note note = (Note) calendarableOrCalendarEventable;
        return note.getOwner();
    }
}
```

Note that there can be multiple implementations of this service; the component will check all that are available. The order in which they are checked depends upon the <code>@DomainServiceLayout(menuOrder=...)</code> attribute.

# How to configure/use

## Classpath

Add this component to your project's dom module's pom.xml, eg:

```
<dependency>
     <groupId>org.isisaddons.wicket.fullcalendar2</groupId>
     <artifactId>isis-wicket-fullcalendar2-cpt</artifactId>
     <version>1.15.0</version>
</dependency>
```

Check for later releases by searching Maven Central Repo.

For instructions on how to use the latest -SNAPSHOT, see the contributors guide.

# **Known issues**

None known at this time.

# **Dependencies**

Maven can report modules dependencies using:

```
mvn dependency:list -o -pl modules/wkt/fullcalendar2/impl -D excludeTransitive=true
```

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

```
net.ftlines.wicket-fullcalendar:wicket-fullcalendar-core:jar:2.2.0
```

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

• 42Lines/wicket-fullcalendar

In turn, this uses Javascript components:

- http://arshaw.com/fullcalendar/ (MIT License)
- http://jquery.com (MIT License)