#### Setting up a TAPIR provider with LIMS extension

Integrating museum collection management systems (CMS) or field information management systems (FIMS) to a laboratory information system (LIMS) reliably can be difficult. Often, data needs to be exported and then re-imported into each system. Presented here is a method to automate this process using the TAPIR protocol.

This document explains how to setup a TAPIR provider with a LIMS extension to connect your database to a LIMS system. This tutorial assumes the use of a collections management database with tissue records, tapirlink software (written in PHP), and the free version of Geneious (biomatters software).

### **Step 1: Setup TAPIR**

There are several TAPIR software installation tools (http://wiki.tdwg.org/twiki/bin/view/TAPIR/TapirSoftware). This tutorial assumes you are using the Tapirlink software available (http://wiki.tdwg.org/twiki/bin/view/TAPIR/TapirLink). Download and install the TAPIR software on a server with the appropriate evironment for your TAPIR software package.

#### Step 2: Incorporate the LIMS extension into the TAPIR provider

While setting up your TAPIR provider (or afterwords), be sure to include the LIMS extension as an additional schema (available at: <a href="http://biocode.berkeley.edu/schema/lims\_extension.xml">http://biocode.berkeley.edu/schema/lims\_extension.xml</a>). You will be asked to map your local database fields to the LIMS extension fields.

# **Step 3: Setup Geneious LIMS**

See the Biomatters site for information on setting up Geneious. Be sure to run the latest version (currently 5.0). Contact Biomatters to obtain the Biocode plugin.

## Step 4: Point the Geneious LIMS system to your TAPIR provider link.

Once you have Geneious and the Biocode plugin installed, right click the biocode icon in the left hand pane, and select "Log in". Choose TAPIR as your FIMS connection, and enter the address of your TAPIR provider.