

CELCAT® Software Integration Plugin Fact Sheet

Introduction

The CELCAT *Timetabler 6* software provides a mechanism for integrating data from existing management systems. This is achieved using bespoke 'plugins' that are written by CELCAT to a customer's specification. This fact sheet describes how such plugins work and may be useful in establishing your requirements. For the latest version of this document see:

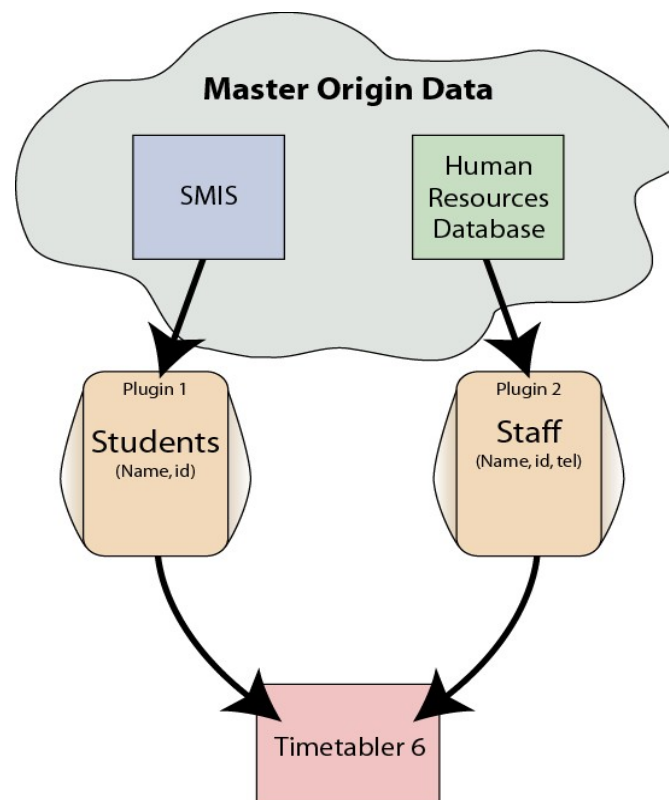
<http://www.celcat.com/forms/CT6PluginFactSheet.pdf>

Integration

Timetabler is used to construct and maintain teaching timetables. Although it is possible to add student and course data directly into *Timetabler*, it is designed to cooperate with other software systems including student management products so that existing data can be automatically incorporated. In these circumstances, the other systems act as 'origin' data sources; they are considered to be the master source of the data provided to *Timetabler*.

For example, if you choose to integrate your Student Management Information System (SMIS) into *Timetabler*, a plugin can be created that allows you to transfer student details from your SMIS to *Timetabler*. The plugin operation can be invoked as often as is required to keep the *Timetabler* student data in sync with the 'master' data in your SMIS. *Timetabler* 'knows' about the origin of its student data and will always regard your SMIS as the last word on this!

So *Software Integration Plugins* are all about allowing you to designate other software systems as the master source of some of your *Timetabler* data - an obvious example is that described above where your student management system supplies *Timetabler* with a list of students. However, *Software Integration Plugins* can do much more than that - they can be used to integrate enrolment data from your SMIS and even event data from another timetabling package. Any number of plugins can be used to provide the information *Timetabler* needs, as is depicted in the following diagram:



Note from the above diagram that plugins usually provide a one-way data transfer mechanism; they do not facilitate the updating of the origin data sources. However, depending upon your requirements, it may be feasible to transfer data from *Timetabler* to a third-party system.

Example

One College uses *Timetabler* to construct timetables and *Portfolio* is the student management system.

The CELCAT bespoke plugin reads the Portfolio database (in this case on an Oracle database server) and, for each student, extracts reference number, names, sex, title, date of birth, address, postcode, and home address and phone number.

These details are then introduced to *Timetabler*. If the student already exists in *Timetabler* the details are updated if necessary; otherwise the student is added. *Timetabler* 'remembers' where the student data came from and each time the plugin runs it synchronises the student data with the Portfolio database. Furthermore, if a student has been removed from the SMIS, the plugin can remove the student record from *Timetabler* (providing there are not extant registration marks, etc for the student).

Tech Note - the data extraction uses a read-only ADO query to the Portfolio database that involves a join on the study_blocks, study_periods, study_block_associations and students tables.

The Portfolio system (at this particular college) is used to associate individual students with 'study blocks' that are akin to CELCAT *Timetabler* groups. So the plugin extracts this membership data and introduces it to *Timetabler*.

The plugins allow the college to operate their SMIS and Timetabling products in the knowledge that any relevant changes made - e.g. new student enrolments, additional classes, etc - are reflected in the timetable.

Specifying a Plugin

If you wish to specify requirements for a plugin, the first step is to complete the *Timetabler* Integration Plugin Pro-Forma and then discuss your requirements with one of our representatives.

The latest version of the Pro-Forma can be found at the following location:

www.celcat.com/forms/CT6PluginProforma.pdf