Integrating a Student Information System with Moodle in a SaaS model

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SIGMA AIE

Integration SIGMA SIS – Moodle

Case study – Facultat Pere Tarrés
SIGMA AIE is the **only non-profit consortium** for the Higher Education sector in Spain.

Created in 1996, **brings together 8 Spanish public universities** to offer technological solutions for their needs of managing the **academic, teaching and research processes**.

SIGMA focuses its efforts on developing and maintaining "**best of breed**" solutions:

- SIGMA SIS Student Information System
- SIGMA CRIS Research Information System
What makes us unique?

Experience
20 + years serving the University Management

Technology
Pioneers in Web Applications for Higher Education

Innovation
Open, mobile and service-oriented solutions

Quality
Our icon - The Enrollment process more complete, reliable and secure

International
Leaders in European organizations, consortia and partners networks

Social responsibility
Gartner recognizes the SIGMA Learning Center in promoting the education sector
SIGMA represents 20% of the students in the Spanish public university system.
SIGMA AIE

Integration SIGMA SIS – Moodle

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Two levels of integration:

**Level I: Data Integration**
- Creating a data interface that allows external systems to obtain a minimalist version of the SIGMA SIS data model.
- Creating a synchronization process between the interface and learning platforms.
- Creating a set of Web services that enable learning platforms the return of information, such as grades.

**Level II: Functional Integration**
- Giving access to SIGMA functionalities, directly from the learning platform.
- Creating a delegated identification system for total transparency of this integration.
- For frequently used modules, creating plugins on the learning platform, that allows these modules to log in at SIGMA information. For example, a lite version of the SIGMA gradebook.
**From SIGMA to Moodle**

- Initial charge of the entire syllabus definitions in SIGMA, thus creating the necessary courses in e-learning platform.
- Daily load distributions of teachers in their groups, as well as the creation of new groups of enrolment.
- Enrolment and unenrolment of students to courses.

**From Moodle to SIGMA**

- Teachers currently put their grades in Moodle to keep the student informed of their grades in a convenient and fast way.
- One of the latest developments in SIGMA is creating a tool that allows the teacher to pass the students’ grades directly to SIGMA, with just one click.
MetaGroup

- Tool that allows the teacher to group two or more of their groups in a single Moodle course. Because classroom teaching and online teaching does not always require the same groups of students.

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**MetaGroup Moodle**

- **Asignatura: 41391 - Trabajo Fin de Máster**
  - Grupo 1
  - Grupo 2: Agrupado en "MetaCuso de Test"
  - Grupo 5
  - Grupo 6: Agrupado en "MetaCuso de Test"
  - Grupo 7

- **Asignatura: 40362 - Comparación Transcultural**
  - Grupo 1

- **Asignatura: 40326 - Antropología del ritual y organización de la procreación**
  - Grupo 1: *No eres el profesor responsable de este grupo*

- **Asignatura: 28699 - Prácticas de Campo en Antropología Social y Cultural I**
  - Grupo 3

- **Asignatura: 40368 - Proyecto de máster, trabajo de investigación**
  - Grupo 2

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**MetaGrupos en Moodle**

<table>
<thead>
<tr>
<th>Id</th>
<th>Nombre MetaGrupo</th>
<th>Integrantes</th>
</tr>
</thead>
</table>
| META_2006_1 | MetaCuso de Test     | Asignatura: 41391 - Trabajo Fin de Máster - Grupo 2
|        |                         | Asignatura: 41391 - Trabajo Fin de Máster - Grupo 3 |
Student Information System functionalities

- Check the class lists
- Check student records
- Enter final grades in SIGMA SIS
  - Transfer and calculation of grades
  - Management of alphabetic grades
  - Check grades template
- Manage records
  - Transfer of records to SIGMA SIS
  - Dates of exams reviews
  - Closing records
  - List of records

More functionalities

- Surveys
  - Fill satisfaction surveys
  - Check teacher report
  - Check subject report
- Pizarra Web
  - Sending and receiving messages from the app Pizarra
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Since July 2013, the Moodle platform was opened to teachers and from September 2013, also for students. Since that day, the system has worked continuously without system failure. During February 2014, a total of 1,122 users entered the Moodle platform from a potential of 1,493. Furthermore, an average of 426 users enter daily, some more than once, providing an average of 935 identifications every day.
Since the beginning of the academic year, teachers of Facultat Pere Tarrés have made 52% of queries to SIGMA SIS by functional integration. In the new schools that we are implementing, this value is 100%, because we no longer give the option for teachers to access SIGMA other than Moodle.
Customers with Moodle Integration

Functional and data integrations

- Universidad Autónoma de Madrid
- Universidad Pública de Navarra
- Universidad de Valladolid
- Escola Universitària del Maresme
- Escola de Ciències de la Salut
- Escola Superior de Disseny
- EINA Enginyeria de Barcelona
- ELISAVA
- FUNDACIÓ PERE TARRÉS
- Universitat Ramon Llull
- HOSPITAL DE LA SANTA CREU I SANT PAU
- Universidad Autónoma de Barcelona