# AttLog™ – www.attlog.com

**Electronic Attendance Logging for Higher and Further Education**

# An Overview of AttLogDB™ – Attendance Database Application

## Summary of the AttLog Data Collection Process

Small (not quite pocket-sized), easily portable attendance stations are generally allocated to each lecturer, who takes them to each of their learning events at which attendance is being logged. Each student is issued with an Attendance Key (or 'dibber') – they normally attach this to a key ring with their other keys. To register their presence, the student dibs their Attendance Key into the attendance station - lecturers can choose whether this happens at the end or middle (provides a short, re-energising break!) of the event. Even with class sizes in excess of 200, the dibbing process for the whole class will take only 2 to 3 minutes. At regular intervals during a semester or term, often after their final learning event of the week, the lecturer takes their Attendance Station/s to an Attendance Administration Centre (e.g. the department's admin. office) - **AAC**. Here, the lecturer or administrator downloads the data from each Attendance Station into **AttLogDB**. This process is very fast and easy, on a dedicated, entry-level networked PC (USB attachment) or it can be managed from an administrator's PC.

After the data download, the Attendance Station is automatically cleared of data, its internal clock re-synchronised, and it is then ready for use once again.

## Introduction to AttLogDB

**AttLogDB** is a web-based database application, is based on .NET technology and either the Microsoft SQL Server database or the Oracle database. The advantage of a web-based application is that it can be used by anyone with access to the Internet, provided they have the necessary security access. This is appropriate at HE and FE institutions, where most computers are connected to the University/College Intranet and the Internet. It also makes it possible (for those that would prefer) to outsource the hosting of the database to a suitable Web-hosting organisation.

**AttLogDB** is designed to run on either a Microsoft Windows 2000 Server with Internet Information Server 5 or a Microsoft Windows 2003 Server with Internet Information Server 6. It requires the latest .NET framework (v2.0.50727) to be installed on the server. AttLogDB works with the following databases: Microsoft MSDE, Microsoft SQL Server 2000, Microsoft SQL Server 2005 and Oracle. The database does not need to reside on the same server as AttLogDB as long as there is a high performance link between the two servers. The database can reside on any server running an operating system that is appropriate for the database.

These products are provided by the customer and most institutions will already have one or more suitable servers on their network. To make full use of the system, Internet access to the database is also required for lecturers and students when they are away from the college campus. SPORTident UK can also assist with sourcing or configuring an appropriate server.

The database has the potential to store millions of attendances at learning events. It has the flexibility to be used by a single department or shared by all departments/faculties at an entire institution. Within the database, the data can remain private at a departmental or faculty level. If an institution wishes to organise the data under the umbrella of Central Services, this is also possible. In 2005, most AttLog users were presenting the system as a student-centred tool to help departments ensure that students are receiving appropriate access to formal teaching and to suitable pastoral care elements, as required. Students who need help can be identified before they 'drop off the radar'.

**AttLogDB** is organised into functional areas, is password protected and access is granted at different levels.

- **System Manager** – Has access to all the features and all data held within **AttLogDB**.
- **Course/Faculty Administrator** – For appropriate student lists and timetables, has access to administrative functions, attendance queries & reports and student contact functions.
- **Course/Faculty Lecturer –** For appropriate student lists and timetables, has access to attendance queries & reports and student contact functions.
- **Student –** Has access to their own individual timetable which shows graphically the time at which they registered their attendance at each learning event. It indicates cancelled teaching events, which is useful if they are based many miles from the institution. It also shows those learning events for which electronic attendance logging is not being used. Each student also has access to their own attendance queries & reports.

# AttLogDB Administrative Functions

### Academic Year Beginning Administrative Tasks

- Update the list of lecturers with login names and passwords who will deliver learning activities for which attendance is electronically recorded. This list can be imported directly into **AttLogDB**. Attendance stations are allocated to lecturers and these allocations are recorded in the **AttLogDB** database. It is also possible to have a number of 'floating' stations that can be shared by lecturers who only deliver a few learning events each week.

- Download lists of students with login names and passwords from the student records database, along with any information about the learning events they will be attending. These lists are imported directly into the **AttLogDB** database.

- Import a list of new Attendance Key identifiers directly into the **AttLogDB** database. These are automatically allocated to new students.

- Download timetables of learning activities generated by one of a number of proprietary database applications used by institutions – e.g. Facility CMIS. These timetables are imported directly into the **AttLogDB** database. **AttLogDB** automatically builds a timetable of learning events for each student and extrapolates it through the academic year. **AttLogDB** uses this timetable to attribute each individual electronic attendance record (essentially an Attendance Key number and time/date stamp) to a particular student's learning event.

### Ongoing Administrative Tasks

- Assist with queries during the download of Attendance Stations.

- Identify Attendance Stations that have not been downloaded recently. **AttLogDB** can report on this and indicate to which lecturer the station was issued.

- Reconcile attendances that cannot be attributed to a learning event. After each Attendance Station is downloaded, any attendances that cannot be matched to a learning event are added to an exception list. The Attendance Exception List is viewed every few days and patterns in the list will indicate a group of students for whom a learning event could not be allocated. This could indicate that the **AttLogDB** timetable is incorrect or there has been a timetable change that has not been applied to **AttLogDB**.

- When Learning Events are re-scheduled on a one-off basis or for the remainder of the course, the **AttLogDB** timetable can be modified manually beginning on a particular date and if appropriate this change can be extrapolated throughout the remainder of the academic year. Following this adjustment, the student's attendances will be removed from the Attendance Exception List described above.

- When for any reason a student is allowed to swap one or more modules, make manual adjustments to the **AttLogDB** timetable. The timetable for that student can be reconstructed starting from a particular date and extrapolated throughout the remainder of the academic year. Following this adjustment, the student's attendances will be removed from the Attendance Exception List described above.

- Manually enter attendance data and indicate sickness or authorised absence. If a student forgets to bring their Attendance Key to a learning event, the lecturer can manually note this. **AttLogDB** can display an attendance screen for each learning event, which shows a list of students expected at the event. Attendance at the event can then be logged manually in **AttLogDB** by either the lecturer or an administrator. Administrators can indicate sickness or authorised absence in the same way.

### Academic Year End Administrative Tasks

- Archive data that is no longer of interest. Attendance records can remain in the **AttLogDB** database for an unspecified period following the academic year in which the learning event took place. This allows the data to be accessed should it be required to provide evidence of student attendance. After a safe period, data can be archived. The data can be restored and re-examined at a later date, should the need arise.

- Collection of Attendance Keys from departing students and making them available for re-allocation to new students.

# AttLog DB Query and Reporting Functions

These functions allow both administrators and lecturers to examine attendance on a number of levels by applying queries to the data and producing appropriate reports that can be used to highlight poor attendance patterns. Whether the lead role in following up poor attendance is assumed by administrators or lecturers will depend on the way the department or faculty is structured. This will determine who makes most use of the Query and Reporting Functions of **AttLogDB.**

Data queries can be based on an appropriate subset of the following parameters:

- Department
- Year
- Course of Study – grouping of compulsory study modules or Selection of Study Modules
- Attendance Type – e.g. Attended (automatically or manually logged), Sick or Authorised Absence
- A Range of Dates (or weeks) of interest
- Student Name
- Lecturer Name
- Minimum % (or number) of learning events missed

By specifying the appropriate parameters in the query, this is a selection of the reports that can be generated:

- **Course of Study Summary Report** – For each appropriate student, a summary of attendances/absences on each module that they attend within a specified time period. For each module, the maximum number of possible attendances is displayed and total number/percentage of missed learning events is displayed for each student.

- **Module Summary Report** – same as Course of Study Summary but report based on a selection of one or more modules

- **Module by Lecturer Summary Report –** for each lecturer selected and each module, students are grouped within lecturer teaching groups.

- **Module Register –** A hardcopy of the register of attendance for each student at each learning event within a specified time period.

- **Module by Lecturer Register –** same as the Module Register but within the register, students are grouped within lecturer teaching groups.

- **Lecturer Popularity League Table –** This report has a jocular title but it shows the percentage of possible attendances that were achieved by a one or a group of lecturers during a specified time period.

- **Student Timetable and Log –** A graphical timetable for a specified period, with an indication of attendances by a student.

There is also the option to export the data that is being reported above to a .csv file. This allows the data to be imported into existing assessment systems. One such example could be a spreadsheet that ranks students based on their marks for coursework, practical sessions and minimum required attendance levels at learning events.

## AttLog DB Student Contact Functions

A group of students can be selected who need to be contacted because they have missed significant number of learning events. The selections are based on the same parameters described in queries and reports above - department, year, course of study, module, date range, lecturer, percentage attendances missed etc. The data can be used in three ways:

- **Standard Letter -** A number of letter formats can be merged with the appropriate data for the students selected above. Printed letters can be mailed or handed to students.

- **Standard Emails** – A number of email formats can be merged with the appropriate data for the students selected above and **AttLogDB** can email them automatically to the students.

- **Export to .csv file** – Some colleges may prefer to use an existing computer system to make contact with students. **AttLogDB** can export the appropriate data to .csv file in a format that can be imported into existing systems.

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