# ASTech

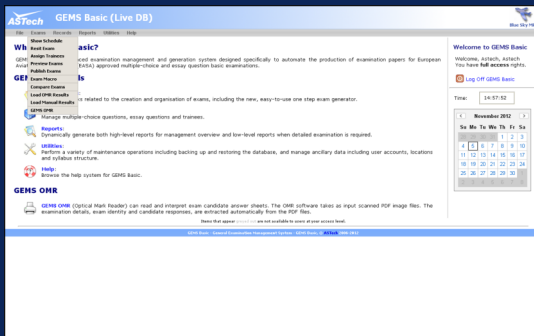## Atlantic Simulation & Training Technologies

## GEMS OMR

### Key Features

- **AUTOMATES THE CORRECTION OF MULTIPLE CHOICE QUESTION EXAMINATIONS**
- **WORKS WITH STUDENT ANSWER PAPER PRODUCED BY GEMS FAMILY PRODUCTS ON STANDRAD A4 WORKSHEETS—NO REQUIREMENTS FOR SPECIALIST STATIONARY**
- **FACILITY TO MANUALLY AMEND AMBIGIOUS STUDENT RESPONSE**
- **RESULT EXPORT IN SIMPLE CSV FORMAT FOR EASE OF USE**
- **OPTIONAL QUICK CORRECT FACILITY**
- **AUTOMATED CORRECTION OF EXAM PAPERS USING OMR**
- **NEW VERSION CAN BE FULLY INTEGRATED IN OTHER GEMS APPLICATIONS**
- **RESULTS WILL THEN BE AUTOMATICALLY BE TRANSFERRED INTO THE GEMS DATABASE**

GEMS OMR—Homepage



GEMS OMR— Process Answer Sheets



## GEMS OMR

The ASTech GEMS OMR (Optical Mark Reader) System is a web application which can read and interpret exam candidate answer sheets produced by a range of ASTech applications, including GEMS Type, GEMS Basic, GEMS Fundamentals, GEMS FCL and GEMS PPL. The OMR software takes as input scanned PDF image files. The examination details—exam identity and candidate responses—are extracted automatically from the PDF files.

GEMS OMR allows the user to manually correct any anomalies it might encounter on an answer sheet (as might happen if the candidate has marked more than one answer to a question.) Exam results may be saved in .CSV format files for export to other GEMS family applications.

GEMS OMR may also be optionally configured to provide a "quick correct" facility which can determine the grade for each exam paper. (Note that this is available only for examinations where all questions are of equal weighting).

The recently released new version of GEMS OMR can be fully integrated into other GEMS applications. GEMS OMR can be selected from the GEMS homepage and once the automatic correction process has been completed the results will automatically be transferred into the GEMS database.

### Functionality

All functions in GEMS OMR are accessed through an intuitive web interface. The loading, processing and export of answer sheets is carried out using a simple OMR wizard.

Additional optional functions include:

- Automatic grading of exams
- Processing of customer feedback forms
- Generation of customer feedback forms
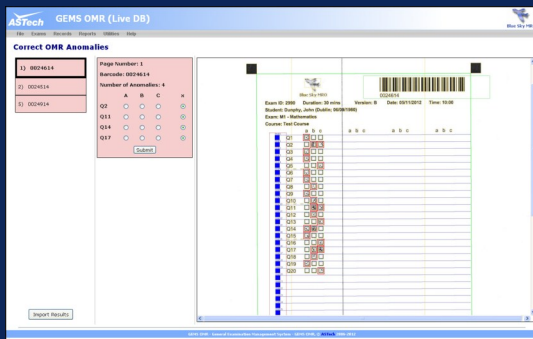
### The OMR Wizard

All the operations required to process a set of exam papers may be carried out using the OMR Wizard. These include:

- Answer sheet import. Scanned PDF answer sheets are imported into the web application
- Amendment of any ambiguous answers. The user may manually select the appropriate answer in case where it is not immediately obvious what the candidate intended
- Quick analysis of examination results, showing how many answers of each type were made to each questions (i.e. how many "A"s, how many "B"s and so on.)
- Saving of results. Results may be saved in .CSV file format
- In the new OMR version results are automatically transferred into the GEMS database
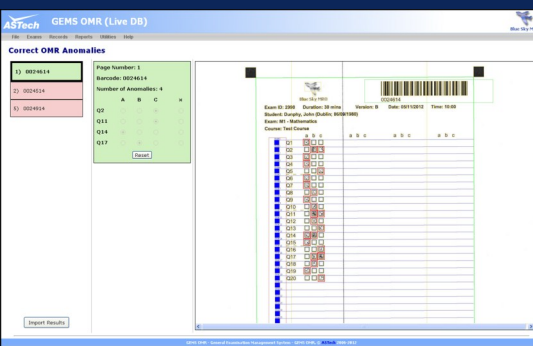
### Optional Functionality

GEMS OMR may be optionally configured to provide a "quick correct" facility which allows the user to rapidly grade successfully scanned answer papers , by uploading details of the correct answers.
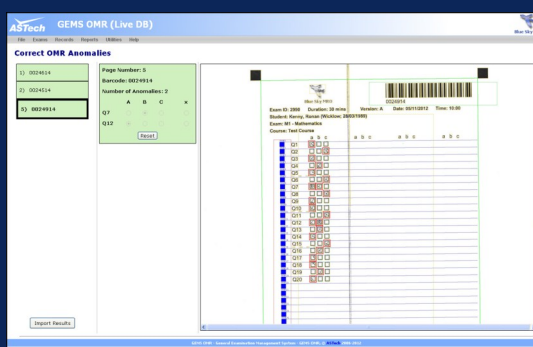
**GEMS OMR—Correct Anomalies**

**GEMS OMR– Correct Anomalies**

**GEMS OMR– Anomalies Corrected**

In addition, GEMS OMR may also be configured to process customer feedback forms of the type distributed after a training course has completed. When this option is enabled, GEMS OMR can generate feedback forms on standard A4 sheets, and process those forms to provide an indication of trainee satisfaction. Users can specify the questions asked on the feedback forms.

## Requirements

GEMS OMR is a web delivered application hosted on customer's corporate intranet. It is deployed on a single VM. Client machines should be capable of running a modern web browser and have good graphics capability.

A multi page sheet feeder scanner device is required to can the completed student answer papers to PDF documents. This is the only specialist hardware requirement—suitable answer sheets may be generated by any of the GEMS Basic, GEMS Type, GEMS Fundamentals, GEMS FCL, GEMS PPL and GEMS Pilot Type products using standard A4 paper and good quality printer.

## Benefits of GEMS OMR

GEMS OMR offers a simple way to rapidly process multiple choice question type examinations, and export the results to GEMS family application for easy correction and analysis.

No specialised stationary is required: answer sheets may be printed by GEMS family products on standard A4 paper, reducing the on-going cost of operation. Similarly, no dedicated hardware is required apart from a standard sheet feeding scanner—which is already found in most modern office environments.

## ASTech in the Aviation Industry

Atlantic Simulation & Training Technologies (ASTech) is an internationally trading software company based in Galway, Ireland. The company specializes in products and services for the development and delivery of training and examination systems for industry.

Customers within the aviation industry include Lufthansa Technical Training, SR Technics, Embraer, TAP Portugal, LRTT, Cargolux, Shannon Aerospace, including.

Other products include GEMS Basic, GEMS Type, GEMS Fundamentals, GEMS Online Exam, GEMS FCL, GEMS PPL and GEMS Pilot Type.

## Contact Us

Sybernet Building
Galway Business Park, Dangan
Galway, Ireland

E-Mail: info@astech.ie
Phone: +353 (0) 91 522316
Fax:     +353 (0) 91 680023

Connect with Us

2