



## The Comprehensive IT Solution for Awarding Organisations

The Quartz information system has been developed by Portico Consulting to support the entire lifecycle of learning and qualification development and management.

Quartz supports all aspects of operations for programmes of vocational learning, QCF and other qualifications – including programme and qualification development, learner registration, achievement tracking, internal and external verification, and certification. Business management is supported through integrated CRM and business intelligence tools. Quartz provides substantial efficiency benefits, improvements in customer service, and compliance with regulatory requirements. It is scalable and affordable for large and small organisations.

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### Fact Sheet - eRegistration, Technical Architecture and Integration, and User-Defined Coding Schemes

#### eRegistrations and eAwards (EDI)

Quartz provides two mechanisms for electronic registrations and awards: files of registrations and awards, which can use a wide range of formats and coding; or alternatively, a web-services API (using the same method used by the DAS, LRS, and QCF Service Layer).

Using the file-based mechanism, centres/providers can e-mail or directly upload files (through Quartz Web<sup>1</sup>) containing the relevant information in a range of formats, and these are then processed in Quartz. When using QuartzWeb, provider/centre administrators receive automated e-mail confirmations of the upload and processing results, and can confirm the registrations directly on line.

Files of registrations can be in almost any 'CSV' or Excel format – columns of data in any order, using any coding scheme for gender, ability status, etc.

Quartz defines a standard format for e-awards, with template files being automatically produced for classes/cohorts of learners. These too are accessed through the QuartzWeb.

**Service Oriented Architecture: Interoperability**  
Quartz has been designed from the ground up to be at the heart of an integrated solution. Today's IT interoperating systems are being built using the industry standard "Service Oriented Architecture" (SoA) – that is, publishing their functionality through a set of web-service API's. This is the mechanism used by the DAS, LRS, and QCF Service Layer for example; and this is way Quartz is built as well.

At the heart of system is the Quartz business engine. This is a set of web-services which encapsulate the IT functions required by awarding organisations and their external stakeholders. These services are used by the Quartz Smart Client (used by awarding body staff) and by QuartzWeb (used by awarding bodies' external stakeholders) to provide end-user functionality.

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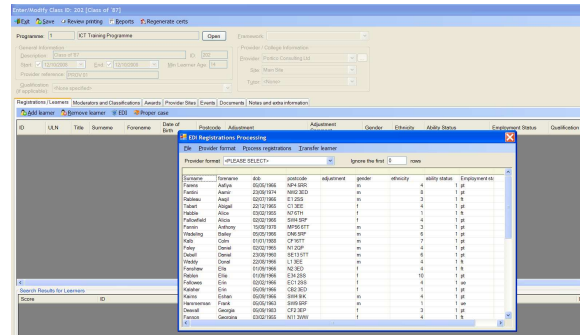
<sup>1</sup> QuartzWeb (the Quartz Portal) is a browser-based application specifically designed to provide the functionality required by external stakeholders.

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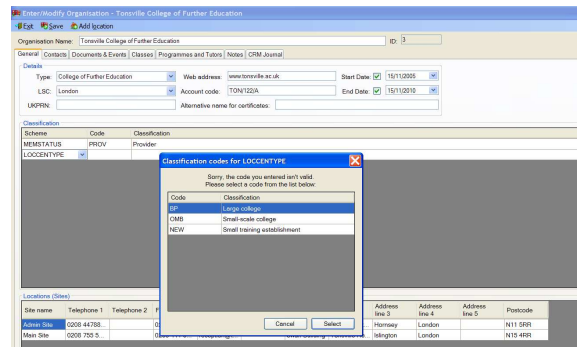
But SoA means that the Quartz web-services can be used by *other* systems enabling it to engage seamlessly in orchestrated sets of related business transactions provided across different systems. (An example is the submission of DAS results – which although involving three completely separate systems, is seen to an end-user as a single business operation.)

### User-Defined Coding Schemes

Quartz gives end-users the ability to enrich the data held in the system by applying an unlimited range of additional, locally-defined codes. Authorised users can create new coding schemes, which can be flat – i.e. comprise a simple list of values, or they can be hierarchical – i.e. code values grouped into categories, sub-categories, etc. Codes which have been applied to items can be viewed in the corresponding items, and can be used flexibly in conjunction with other criteria through Quartz's search screens and reporting facilities.

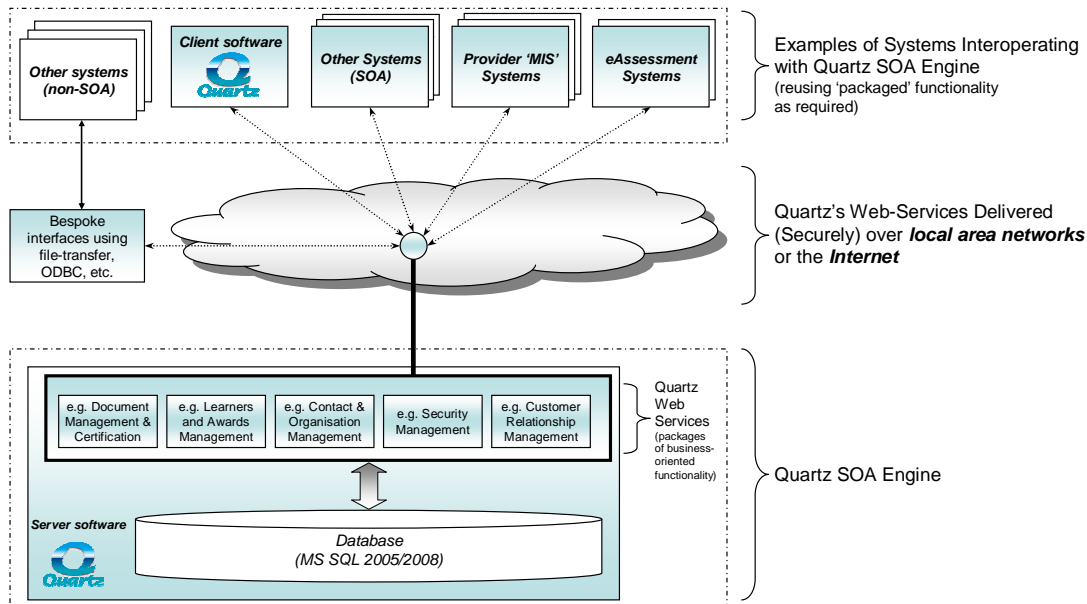


Processing eRegistrations (from Extranet, e-mail, etc).



Applying user-defined codes to an organisation.

## Quartz's Service Oriented Architecture



### Portico Consulting

Portico Consulting provides a range of management consultancy and technology services in the public, not for profit, and education sectors. We have extensive experience of supporting the operations of awarding bodies and our systems have managed

the achievement records and certification of millions of learners.

For more information visit [www.quartz-system.com](http://www.quartz-system.com), call and ask for Robert Gale or Matthew Robins, or e-mail [mail@quartz-system.com](mailto:mail@quartz-system.com)

