



## Arriva London migrates legacy bus management applications to Windows

At Arriva London, the largest bus company in London, we run more than 1,500 buses a day from 14 garages. We are part of Arriva Group, one of the largest European transport services organisations, employing 30,000 people. Arriva Group buses run across the UK, and deliver more than one billion passenger journeys across eight European countries every year.



### The challenge

At Arriva we run a number of bus routes in the capital, and our bespoke scheduling applications manage crew rosters, route schedules and carry out pay calculations, before feeding the information through the separate payroll systems. When we found out these legacy applications were running on hardware that would no longer be supported, we began considering the options for moving our bus management systems.

*Alan Ricot, our IT Manager comments, "These systems touch staff from administration and support right up to the operational director. It was vital to move these applications onto new hardware without disrupting critical day-to-day operations."*

Implementing a new package would have adhered to Arriva Group policy, but would also have forced changes to working practices, which we were keen to avoid. Such changes would have probably incurred significant retraining costs in all our garages, with no guarantees of improved functionality. A new bespoke solution would have likewise involved very large costs and additional risks. We were happy with our existing system, so the best option was to migrate it.

### Client >

Arriva London

### Sector >

Transport

### Project >

Application Migration

## Solution deployed

Our long-standing managed services supplier, Capgemini, helped us select Advanced to handle the application migration to an open and more flexible Windows environment.

**Barrie Graham, Business Development Manager at Capgemini, comments,** *"Advanced undertook the majority of the COBOL code migration.*

*Ordinarily this may have been a time-consuming project, but their toolkit automates a lot of the transfer and shortens delivery times. We were able to demonstrate to Arriva a mini-migration after just three months. There was minimal disruption to operations, meeting both the planned timescales and budget. We chose Advanced because of its expertise in this area and process-oriented approach to identify all key considerations at the outset."*

Advanced converted our COBOL code to ANSI standard open systems ACUCOBOL on an IBM xSeries model 255 server, using the Microsoft Windows Server operating system with an SQL Server database. All of this this was undertaken while avoiding critical system downtime. After an extensive usability and testing period, the new system is live and has been rolled out to 14 Arriva garages around the capital.

We wanted the migrated applications to offer the staff in our garages the same character-based look and feel that they were used to. We hoped it could also provide a Windows graphical browser interface for other staff where appropriate. This unusual hybrid solution was provided almost entirely automatically by Advanced's Graphical Adapter product. This produces at run-time both the equivalent character screens and the new graphical browser screens in the Windows environment – without any changes having to be made to the associated COBOL source.

## The Benefits

Having moved from a proprietary database to the SQL relational database, we now have the ability to use a variety of other tools, enabling us, for example, to undertake graphical modelling, update interfaces to match users' roles, and integrate with other systems for better reporting.

As a result of the migration, we have been able to reduce business risk and the ongoing maintenance costs associated with the applications. Vital information is also easier to retrieve.

**Barrie sums up,** *"Through the successful migration of this application, Advanced has demonstrated to Capgemini that it has the experience to deliver complex projects on time and to budget. They have been a pleasure to work with, and we would be happy to engage their services on future migration projects."*

*"Advanced have migrated our applications without any noticeable changes for daily users. We haven't had to embark on costly retraining programmes and we haven't had to make major changes to a system that already worked well. Minimal change was important to us and this has been achieved. I'm impressed."*

**Alan Ricot >  
IT Manager >  
Arriva**

## More information

**w** [oneadvanced.com](http://oneadvanced.com)  
**t** +44(0) 8451 605 555  
**e** [hello@oneadvanced.com](mailto:hello@oneadvanced.com)

Ditton Park, Riding Court Road, Datchet, SL3 9LL

Advanced Computer Software Group Limited is a company registered in England and Wales under company number 05965280, whose registered office is Ditton Park, Riding Court Road, Datchet, SL3 9LL. A full list of its trading subsidiaries is available at [www.oneadvanced.com/legal-privacy](http://www.oneadvanced.com/legal-privacy).