



## Car/IT Integrates a 'New Model' With BBJ

For nearly 15 years, Audev's Car/IT has been the software application of choice for many car dealerships throughout the Netherlands, Germany, Bulgaria, and Mexico. Its power and popularity primarily lie in its two main modules named as the Dealer Management System (DMS) that manages all administrative tasks in the dealerships, and the Customer Relationship Management (CRM) module, which addresses all marketing-related activities.

The origins of these modules date back nearly 30 years. In the late 1990s, Audev rewrote their DMS, originally based on an application from the 1980s, with Visual PRO/5® and PRO/5 Data Server®. In early 2000, Audev integrated the Visual Basic 6-developed CRM with the DMS. Needless to say, there was a great opportunity for enhancing these modules and addressing the disadvantage of maintaining two databases in one application and developing in two different languages. With BASIS technology moving forward so fast and offering such a variety of new and exciting features, Audev took the step to fully upgrade Car/IT to the BBJ® environment and eliminate the Microsoft technology components.

Read on for a close look at how Audev, in their own words, modernized their application with BBJ.

**T**wo years ago, we took our first step with the release of the DMS Workshop Planning program in BBJ. By staggering the transition process, we were able to ensure our programs were compatible with the new environment, while at the same time learning about what opportunities BBJ offered us.

During the transition, the excellent team at BASIS, from engineers to management, supported us by helping us ensure that our product stays ahead of the competition and fulfills the specific needs of our customers. While a complete transition is challenging, it also offers a unique chance to look at our concept afresh, and redefine aspects of the application.

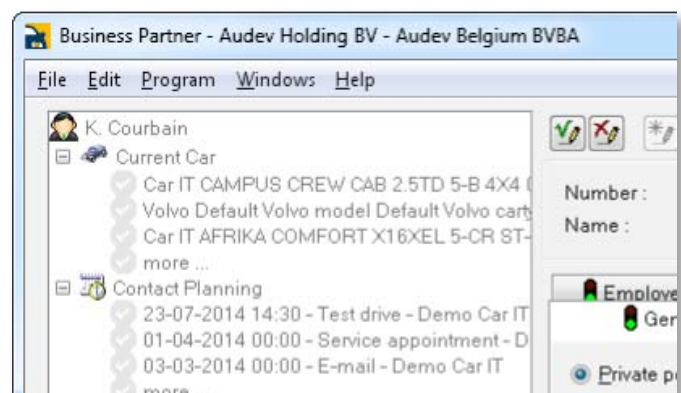
### Business Partner

A long-held goal of ours, for example, was to ensure that the Business Partner of a car dealership was always at the heart of the application. And that is what we achieved with the Business Partner program, which manages all of the information that is available to help dealers to provide efficient and professional service to their customers. The program displays a 'tree view' on the left with relevant information such as cars, contact plans, and order history (see **Figure 1**).

To manage the Tree control, we designed and used a custom BBJ class object. This hides the details of the original component and provides an easy interface to implement in other parts of the application. Depending on the role of the users, they can access



**Wimco Driesse**  
CIO Audev BV



**Figure 1.** The business partner as the central object

key functions from the tree with a right mouse click as shown in **Figure 2**.

Across the top of the main screen are a number of tabs with related information, all available to users according to their access rights. On the 'General' tab, we store information about social media accounts to which it will be possible to send messages via the Car/IT Communication Handler (see **Figure 3**).

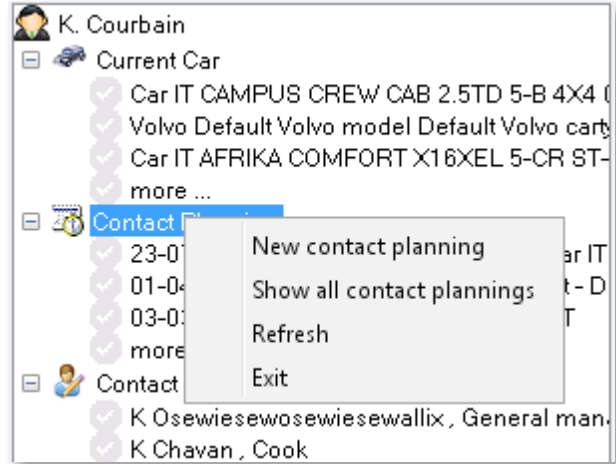
**Diary**

The second major redesign was the 'Diary' program (a calendar program with scheduling support) as shown in **Figure 4**. Bbj made it easy to develop this program that enables users to create and manage meetings, appointments with their business partners, and other events.

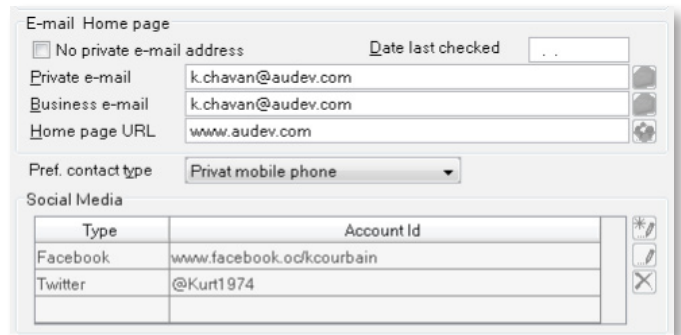
**Google Apps Integration**

We are working to implement a calendar that more closely matches the look and feel of Google Calendar. To accomplish this, we are collaborating with the BASIS engineers to update the BASIS-provided GApps building block utility to the new Google Calendar API version 3.0. This allows us to reach our goal without having to develop that functionality ourselves.

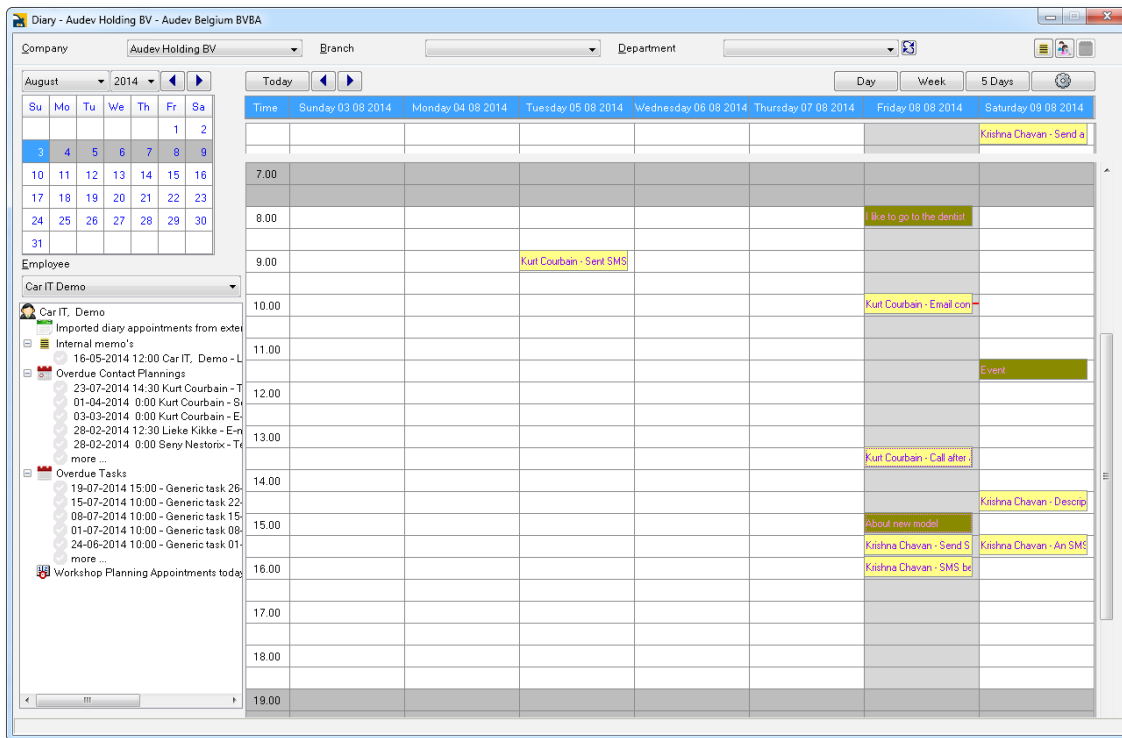
The integration will be a two-way process between Google's calendar and the Car/IT calendar. For example, if Karl makes an appointment in the Car/IT calendar, the program updates his Google calendar, and when he creates an appointment in his 'external' calendar, it appears in the tree view as an imported appointment. From here, he can invite a business partner to the appointment and from then on, the calendars are linked and updated in both directions.



**Figure 2.** In the tree, a right mouse click brings up a pop-up menu



**Figure 3.** The General tab contains communications options including social media accounts



**Figure 4.** Car/IT Diary program

## Layer Functions

In addition, we created a component for the 'Diary' program that handles all the user interface layer functions. A user can easily drag and drop diary events within Timed and Not Timed zones. Events scheduled for the same time will appear split over the available display area. To implement this component, we created multiple BBJ custom classes and are also using multiple Java classes to maintain the data in memory. This gives optimal user performance even in a multi-user system with minimal hardware capacity.

## Grid Enhancements

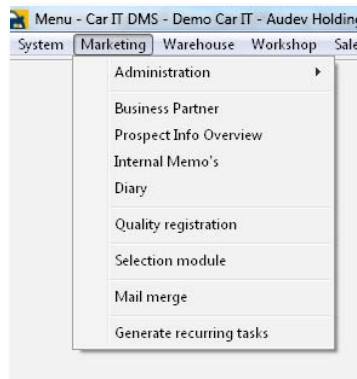
One critical component of the 'Diary' program is the grid. BASIS engineers enhanced the BBJGrid control with new functions so we were able to implement all our requirements. We developed all of the other functionality in-house without any notable problems. When issues arose, BASIS engineers were able to help us solve them within BBJ.

## Menu

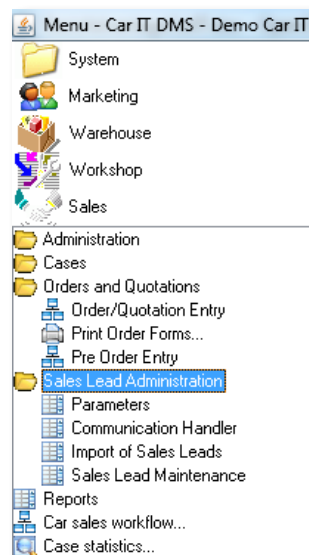
In examining the existing DMS, we decided that the menu looked outdated; **Figure 5** shows the legacy menu.

To give it an improved look and feel, we replaced it with a new, modern multiple document interface (MDI) menu system. In an MDI menu, tasks launched from the menu's MDI parent are separate invocations of BBJ but they live inside the menu's workspace. This ensures that the processes are tied together and show as a single task on the Windows desktop. This MDI menu system takes into account the existing rules for security while still maintaining the company concept of Car/IT.

Here again, the BASIS engineers provided assistance that was very helpful. We adopted some existing components from the [BASIS GitHub](#) repository and moved forward quickly. This part of the project is still under development, but **Figure 6** gives you a sample of the 'new' menu panel of the MDI.



**Figure 5.** Legacy Car/IT menu



**Figure 6.** Prototype of the new MDI Car/IT menu panel

## Summary

In the next few months, we will release our integrated DMS/CRM version of Car/IT. Combining a new look and feel, a great team of Audev engineers, and the support of BASIS engineers – and based on BASIS' BBJ technology – Car/IT is ready for the future.

But ... we're not done yet! We already have other ideas in mind like extending parts of the application to mobile devices, moving to a browser user interface, and many more. With so many exciting opportunities offered by BBJ technology, the road ahead for Car/IT is a long and interesting one! ■

Audev, founded in 1989, develops software for the automotive industry using the talent and experience of developers with roots in both automation and the automotive sector. Audev's software, Car/IT, is the first open DMS capable of handling multiple manufacturers, multiple suppliers and multiple languages. Its leading edge technologies allow Car/IT to fully integrate and interface with the communications tools and applications programs of the various manufacturers. Long-lasting relationships with the users of Car/IT products, established by leasing and not selling the software, ensuring that Car/IT suits the needs of every dealership, for every dealer size, for every brand, in every language. [www.audev.com](http://www.audev.com)



Wimco Driesse, CIO of Audev since 1999, has been active in the automotive industry for more than 18 years. Wimco is responsible for all new product development in Europe, Latin America, and the US.

