



ActiveReports Allows Total Computer Group to Combine the Benefits of .NET Managed Code with Fast, Flexible .NET Reporting

Fast Facts

Customer: Total Computer Group
Web site: www.totalcomputer.com
Industry: Law enforcement technology

Customer Profile

Total provides end-to-end solutions for clients, with focus on the special needs of law enforcement agencies, from technology implementation to managed services.

Solution Profile

Total Enforcement is a cutting-edge solution to the problems faced by law enforcement with their unique mobile field reporting needs. It is a state-of-the-art Records Management and Computer Aided Dispatch System implemented via the Cloud using the Windows Azure platform. ActiveReports powers their extensive reporting functionality.

GrapeCity Software

- ActiveReports

“Since it’s written in managed code, we really never had any significant issues with ActiveReports at all. This is one of the reasons we became devoted to ActiveReports and Data Dynamics, and now to GrapeCity.”

Al Perez, Software Architect, Total Computer Group

Business Situation

The massive paperwork, data, file, and communications requirements of law enforcement are legendary. Police movies and TV shows commonly feature characters beleaguered by masses of it. Every ticket, theft report, and accident scene investigation triggers another cascade of it, requiring someone to manually input data, file cases, and create reports.

Emergency calls to 911 require tight information sharing between Central Dispatch and Police officers in the field. Lives can be at stake, so it is critical to arm officers with accurate and relevant information as they head into dangerous situations.

Technology can:

- Reduce manual data entry
- Save time, money, resources
- Improve effectiveness and accuracy
- Facilitate investigations and outreach
- Tighten communications and response times

Business Challenges

In 2004, Total Computer Group set out to build a comprehensive and innovative law enforcement solution, using pure .NET technology from the ground up for full integration.

We needed to:

- create hundreds of reports for the solution in a Visual Studio-integrated designer
- let our users preview, export, email, and print reports
- integrate the preview control into our WPF Windows
- export
- keep our MSI down to a reasonable size

Why GrapeCity products?

We tried Crystal Reports, but liked the way ActiveReports handled subreports better. ActiveReports let us keep our MSI size down to 8MB, whereas other reporting solutions inflated it to almost 60MB.





We were looking for a reporting tool that was integrated into Visual Studio, and that was written entirely in managed code. ActiveReports filled the bill on both counts with tight integration and a complete rewrite of the old product into C# rather than the wrapped classes some of the reporting products offered.

Solution

Our Total Enforcement solution contains over twenty modules such as Computer Aided Dispatch, Records Management, Events, Alarms, Case Management, Arrests, Warrants, and Citations. Each of these modules uses a number of ActiveReports, so in total there are hundreds of reports throughout the solution.

Each module has a report selection interface like in the screen shot above. There are list reports, reports integrated with Bing maps, reports of all kinds. We have a brilliant development team, and we really never had any issues with ActiveReports.

Our entire flagship product is on Microsoft Azure, and all of the ActiveReports are run from a Smart Client that connects to Azure. We were able to migrate our entire solution, including hundreds of reports, to the Windows Azure platform in only three weeks.

Connecting reports to the Azure database is the same as connecting to any database with ActiveReports. However, except for custom reports, we do not connect directly to the database. For the most part, we use an in-memory object that we fetch from the database, but for custom reports, we use a connection string like we would use with any other database. With the flexibility of ActiveReports, it is all really simple.

The user selects reports in the report selection interface above, and we display them in viewer tabs as shown in the screen shot below. All of our windows are WPF (Windows Presentation Foundation), and most of the functionality is offered or supported by ActiveReports:

- Export to a variety of formats
- Save reports
- E-mail
- Print all or a selection of reports

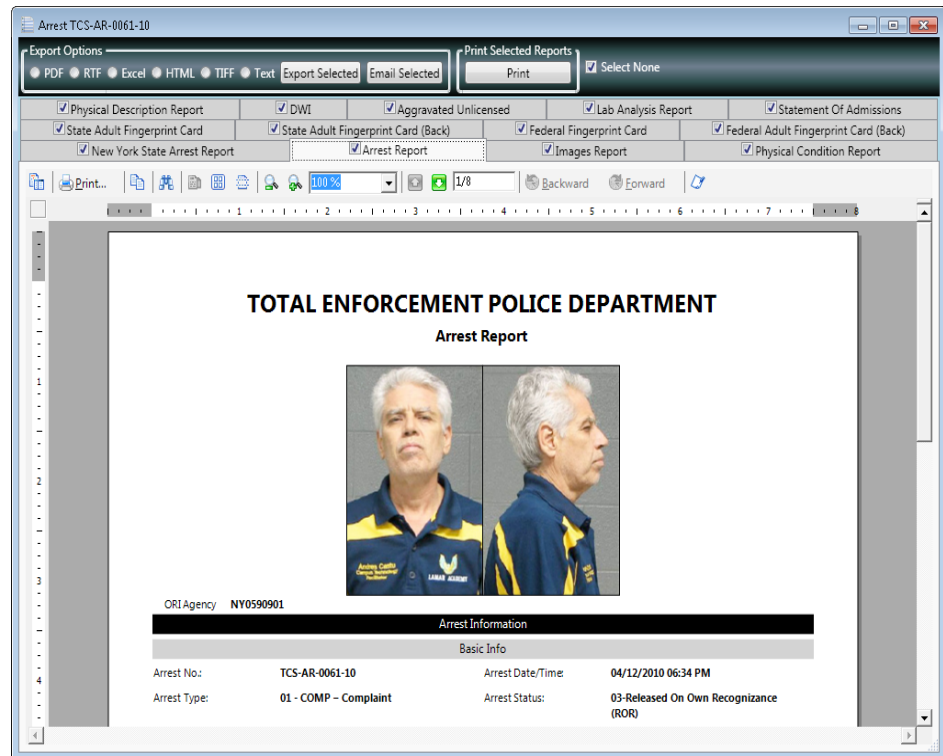
To offer this, we create an array of selected reports. For each report in the array, we create a tab with a viewer control instance, and display the report in it. It was pretty straightforward to develop.

Customer Case Study ActiveReports



“These are great technologies and should be staple industry products like the legacy solutions have.”

Al Perez, Software Architect, Total Computer Group



Benefits

- We provide enhanced crime and statistical analysis reporting.
- We enable police officers to create reports with just a few keystrokes.
- Law enforcement can print, export, e-mail, and save reports to avoid redundant data entry.

Looking Ahead

In future versions of Total Enforcement, we plan to display more information graphically and develop built-in dashboards and allow customers to build them as well. Providing this with ActiveAnalysis and with 3D charts and graphs is a next logical step for us. Although customers can do this with many Microsoft products, nothing beats having an integrated solution that produces this info with the click of a mouse. The simplicity and speed offered by such integrated solutions are priceless.

