InBrief

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BROADCOM®

Easytrieve Modernised

> At least this method is something I'm more familiar with… it's close to what I do on a day-to-day basis.
>
> **Front end developer on using VS code instead of 3270**

The company

Easytrieve has a long history, latterly as part of CA Technology, until that company was taken over by Broadcom. It is now marketed as a Broadcom product: Easytrieve Report Generator. The Broadcom acquisition was 5 years ago now and we think that mainframe products (which were one of CA's strengths) have a healthy future, with modernisation as Mainframe 3.0, under Broadcom. We also think that Mainframe 3.0 involves breaking the old mainframe silo, and that involves extension of mainframe (and distributed computing) products to operate across all platforms.
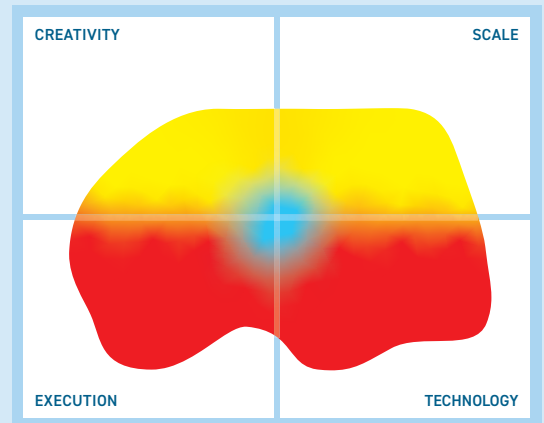
We see Broadcom as a safe bet as a company, with a rich product portfolio, which it is actively seeking to support and modernise. Its success will depend in how well it implements its mainframe product modernisation plans and, in part, on how well it manages the expectations of the customers it acquired with CA, although this seems to be settling down now after 5 years.

The image in this Mutable Quadrant is derived from 13 high level metrics, the more the image covers a section the better. Execution metrics relate to the company, Technology to the product, Creativity to both technical and business innovation and Scale covers the potential business and market impact.

What is it?

Easytrieve has developed out of what was a 4GL reporting tool, but think of Easytrieve now as a low code, highly productive, report generator with added value from file and data manipulation. The aims of the modernised Easytrieve, according to Broadcom, are to:

- Give business and systems analysts better insights, by supporting more export/import formats (including CSV and Excel);

- Support agile report development through integration with tools such as the VS Code IDE; better code quality with improved syntax checks and simplified testing; and access to more data with simplified SQL support;

- Achieve greater efficiency for IT Operations with easier admin, improved data handling and enhanced control over, for example, file allocations.

Easytrieve has now been modernised in the spirit of the Open Mainframe project and Zowe – it provides a rich and supportive user experience by combining the best aspects of mainframe-native and distributed tooling.
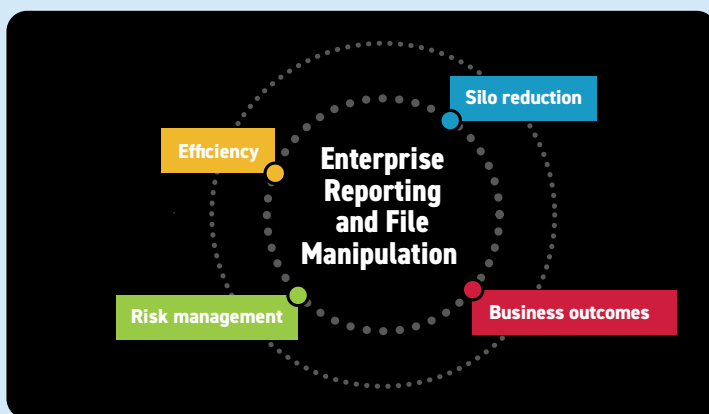

Figure 1 – Enterprise Reporting and File Manipulation

Challenges Impacting Enterprise Reporting Tools

Growth in compliance rules
3-4K
New compliance rules per year

Explosion of data
23%
Data explosion per year

New reporting requirements
$5B
environmental, social and governance reporting cost thru 2025

Figure 2 – Challenges impacting enterprise reporting tools

Figure 4 – Easytrieve Modern Development Experience (VSCode)

What does it do?

Easytrieve does what it says on the tin – it makes retrieving data and reporting on it easy, but it can also reformat and extend data. These days, Easytrieve v11.6 is available for zOS, Windows, Linux and Unix with roughly similar capabilities on each, where appropriate (obviously, the Windows-based compiler and runtime environment is only available on v11.6 for Windows, for example). Easytrieve is pretty feature-rich – a selection of features we particularly like (full list of new features **here**) includes:

> **"**
> *The code itself is not too difficult to understand and it's well documented. Since it's all in VS code, it's not too daunting a task to open up and make modifications.* **"**
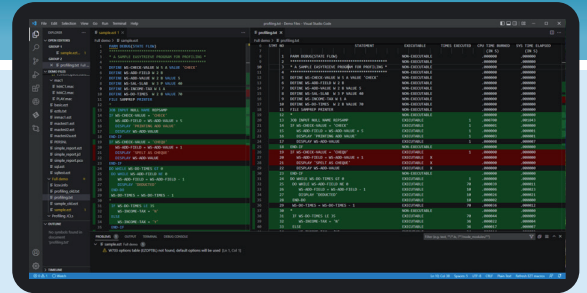> **DevOps Engineer**

- The profiling and code coverage toolkit for zOS performance insights;

- Language support for VS code on Windows, which should make the product's user experience more accessible;

- An extensive set of macros for effective data and file manipulation and/or transformation;

- Report output in XML format on all versions, which should make reporting across all platforms easier;

- Detailed technical features such as system-determined block size for efficiency/performance on xOS – being available on several platforms mustn't compromise performance on specific platforms;

- Automation of SQL SELECT statements for efficiency/productivity on all platforms;

- Many interoperability features across all platforms, such as 8-byte binary field support, big integer value support and date format override at program level (obviously, EBCDIC/ASCII code conversion and the like is handled automatically);

- ODBC SQL support on the Windows, Linux and Unix versions, so any database is accessible.

Leading Organizations Rely on Easytrieve® For Mission Critical Reporting

7 🏛
of the Top 10 US Banks

3 📱
of the Top 5 Global Telcos

7 🚗
of the Top 10 Global Auto Companies

Figure 3 – Easytrieve adoption

Why should you care?

You should care about modernised Easytrieve because silo reduction is necessary if companies are to "do more with less" and take full advantage of modern developments in IT. Broadcom has undertaken research with its customer-base showing that, unsurprisingly, organisations have difficulty introducing new developers to mainframe tooling; and that a modernized experience can increase confidence level sand shorten the ramp-up time for a new developer. Mainframe 3.0 modernisation generally helps to attract new talent to the mainframe environment and make it quickly feel at home. In addition, Easytrieve now offers a rich distributed systems capability, which reduces barriers to gaining cross-platform experience.

Although mentoring and support is still needed. One developer said *"I'm comfortable with VS code but I'm not used to this syntax"* and confidence increased markedly after participants had undertaken test problems in Easytrieve. One software developer said *"given that I have done this now... If you asked me [to make] changes, I'd be comfortable"*.

The bottom line

Easytrieve is well-established and trusted by those people using it. I first met it in the last century, when we used it to support end-user computing, allowing 4GL access to data in a (mainframe) transaction processing system without having to queue up for the IT group's attention. It worked very well in that role then and has remained useful in that environment. Now, Broadcom has modernised Easytrieve, enabling DIY access to data (across more environments and not just the mainframe) for 3 personas: business and systems analysts; application and report developers; and IT operators. We think that it should, if implemented properly (with training available, and perhaps an Easytrieve champion/evangelist, the way it was done when I first met it), be a major catalyst for breaking down silos in the IT organisation. The future opportunity, we think, is to add a 4th persona, business end users, allowing managed end-user computing to take some of the load off the IT group.

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