

Case Study – EWS Wireless

Emergency Warning Systems (EWS) is a wireless startup and, without large budgets, needed to be able to build production test systems quickly without re-inventing the wheel.

Being a first-generation product, EWS needed a mature platform and solid tools for in-depth data analysis and troubleshooting to verify designs and manufacturing processes. By leveraging Verifide's platform with dynamic database, EWS could start writing their tests immediately, as well as store and analyze data right away without building testing infrastructure or analytical tools.

Through better visibility into data and reduced manual labor, EWS could bring down analysis and development effort as well as manual labor over 90%.

Problem:

Emergency Warning Systems (EWS) is a wireless startup based in Australia with patented technologies for emergency warning broadcast over radio frequencies.

EWS needed to switch from startup mode to production mode and needed to get up and running quickly. They also needed thorough access to data to validate their design. On startup budgets meant they needed to be efficient with few resources and short schedules.

This posed a few challenges:

1. They needed in-depth access to data and charts and the ability to trend data to ensure the quality of the product and manufacturing processes.
2. Trying to build a test executive, data storage and analysis framework by themselves would drain their budgets that should be focused inward towards their product.
3. Because specifications and performance are not established in the early stages, they needed the ability to frequently iterate on test sequences, settings and limits.

Solution:

Verifide gave EWS a solution that they could leverage right away and they were writing tests within the first hour of installing the software.

Verifide gave them:

Modular Services Architecture

Verifide's VServer architecture is a plug-and-play distributed architecture where test system developers can build systems by creating modular components. EWS could build driver interfaces, tests, and DUT control modules easily using the sample code and videos. This allowed them to get started right away without overhead of developing and integrating test executive code.

Dynamic Database and Rich Data Types to manage Data

Verifide's dynamic database provided the full power of a database to query, index, and search- without database administration. In addition to typical data types like strings and numerics, our LiveData technology allowed them to store arrays, tables, complex numbers, images, binary, and other advanced data types that are hard to manage in databases. Verifide's data framework gave them the power of a database with the flexibility and simplicity of flat files.

Interactive Data Analysis Tools

System engineers and test operators could use our suite of interactive tools to visualize data, drill down, search, and compare test data. Access to data from anywhere is important, so these tools can be leveraged from our web-based application as well as our desktop client. Tools are also included for trending, statistical analysis, reporting, and production metrics. This allowed less downtime and quicker troubleshooting as well as a view of production metrics.

Conclusion:

By using Verifide, EWS engineers could do in minutes what would have taken an hour or more to sort through data. In addition to eliminating the need for custom test executive and infrastructure development, Verifide removed 90% of the effort of gathering and analyzing data and allowed EWS to focus on quickly designing and manufacturing its products.

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We offer systems to support emergency response workers so complete reliability and out of box quality has been part of our product requirements from the founding of the firm. We evaluated several options for test executives--including an in-house development effort and NI TestStand--and selected PASS from Verifide because it would allow us to focus on writing end-of-line manufacturing tests without having to develop our own test execution infrastructure. We were operational within days and able to start testing products using tests we had written using the Verifide platform. That was 2 and half years ago and in the interim we have found the team at Verifide to be very helpful and responsive, adding features we have requested to make it easier to for operators to position the equipment to be tested and press a button to run the tests.”
– Spero Colyvas – Lead Engineer, EWS

About Verifide

Verifide was founded in 2006 with the motto of “Rethink Testing”. From test operators to test developers to system engineers and production managers- Verifide empowers all the role players in your test organization. Our testing platform has been validated in industries such as aerospace, semiconductor, wireless, automotive, and medical equipment.

Located in San Jose, California; Verifide's customers include large aerospace companies like Boeing, Lockheed, Orbital ATK, and BAE Systems.

Contact us at hello@verifide.com or visit <http://www.verifide.com> to learn more.