As a leading technology innovator serving government and commercial customers around the world, Harris Corporation seeks to solve the toughest mission-critical challenges with solutions that connect, inform and protect its customers. Harris offers software and hardware systems for a variety of areas including tactical communications, air traffic management, space and intelligence, weather systems, avionics and electronic warfare, and geospatial services. With such a broad portfolio, Harris needed a test management tool that would be able to keep up with the pace of each products innovation and ensure the highest quality for its customers.

Supporting multiple product lines creates dynamic team environments, making it challenging to support multiple project teams and different development methodologies in parallel. Between the various software and hardware groups, Harris needed a way to manage more than 300 projects simultaneously. Adding to the complexity of their environment, the release schedules across projects varied from 2-3 major releases per year to 1-2 baselines per week.

Besides the sheer volume of products and projects, Harris also needed a way of managing automated and manual tests, integrate testing to Jira for requirements-test case traceability, and reporting to track weekly regression results. For these reasons, Harris decided to evaluate a test management platform to streamline processes.

When asked why Zephyr (Standalone Edition) over other test management systems? GCS Group Leader for Harris Corporation, replied “The deciding factors were price, deep Jira integration, and the ability to run in Windows and Linux environments.”
Test Management Benefits

Support for hardware test management

Zephyr was first brought into a new effort to gradually acclimate teams to the change in development. As Harris began to see the value of Zephyr, it migrated hardware test management to reap further benefits. Harris trained technicians to modify the daily work routine around Zephyr and now uses the tool to create all new test cases as well as conduct weekly regression testing. Now Harris is able to manage far more pieces than in their previous process. Instead of being limited to 300 pieces of hardware at a time, the organization is effectively managing over 1,000 items. This will be a significant capability as their client base continues to grow.

Managing multiple methodologies, product and projects in parallel

Zephyr has also enabled Harris to support agile testing methodologies more effectively. The organization uses incremental development and a modified agile approach through Jira to plan its month-long sprints to deliver new functionality. Jira paired with Zephyr gives the team a way to monitor progress across projects, move work to future initiatives and facilitate communication between members. The software team can also use the tools for reporting on overall feature development and breaking down tasks into manageable parts for each individual.

Real-time reporting

The report generation offers another advantage for Harris to share test results and link in Jira to connect any known issues. This allows tracking of known issues using Zephyr and Jira to allow spiral development planning by software to correct issues quickly. This saves Harris six hours per week by creating reports and has improved information sharing during staff meetings, increasing efficiency in workflow management. The Project Dashboard also enables easy access to workload status, to give stakeholders peace of mind that everything is on schedule. The test management solution has also inspired everyone to accomplish tasks and solve issues quickly to achieve clean regression test runs.

Seamless integration to any automation tool

The integration of Sikuli with Zbots allowed for the integration of manual and automated test. It reduced paperwork and allowed for one report to be developed for both automated and manual test. It also allowed for the automation to be remotely kicked off on another machine, including nightly batches of scripts to be run.