



SOFTWARE FOR MANUFACTURING & DISTRIBUTION

MICROSOFT DYNAMICS GP™

BUSINESS SOFTWARE DEVELOPMENT

Software Validation with Test Ease

Implementing Dynamics GP in a FDA regulated environment requires that the implementation be done in a manner compliant with the FDA 21 CFR Part 11 regulations. The general thrust of this regulation is that the software, as implemented, must be proven to provide accurate recording, storage, and retrieval of information. Specifically, you must be able to prove that the system can provide 100% accurate cradle-to-grave lot number traceability.

In practice this “proof” is created through the design and execution of validation tests. This is a difficult process that requires careful documentation of the exact way in which each GP window will be used. A test is then written to “validate” that the window or function behaves as expected, as demonstrated through screen captures of the use of the window.

As with any implementation, the testing process has many interrelated decisions. Keeping track of the test results from one part of the system and the impact they have on other aspects of testing can drive you nuts.

To address this, some companies offer validation “templates”. The templates are a collection of pre-written “tests” for many windows in the system. There are several drawbacks to this approach:

- The templates are generic, usually written to cover an expected use.
- The templates usually cover only the most commonly used GP windows
- The templates rarely cover 3rd party products, and cannot address custom code.

Since the tests need to be specific to each implementation, facing a load of generic tests that need to be addressed by hand can leave you feeling a little deflated.

We thought: Why not automate the generation of test scripts? It seems like a simple question, but perhaps it was a stroke of genius. The idea

got tossed around for a while, taking nearly a year to completely firm-up all of the details. The result was Test Ease.

Test Ease is our new automated test scripting software. The Wizard-based user interface guides you through a series of questions, then automatically generates validation test scripts.

The key issue that we solved in creating Test Ease was: How will the software be able to automatically generate questions for any Dynamics GP window, or for that matter a window in a 3rd party product or customization? It would be too time-consuming to hard-code questions for every GP window, and it would be impossible to do it for all 3rd party products and/or customizations.

We solved this problem by inventing a proprietary system in Test Ease called the Specialized Window Integration Method and Enhanced Request System, or SWIMERS. The SWIMERS in Test Ease locate every window in Dynamics GP installation, then work their way inside the software to integrate with the code. The module then identifies the functions of the penetrated window, and passes that information over to the test script generator.

Virtually Automated Scripting (VAS) uses the window information to create a series of questions about how the window is being used. Once the questions are answered, Test Ease creates a test script for that window tailored to the specific implementation. Where the “test template” approach described above provides only generic templates, our automated system produces test scripts that are already 100% tailored to the implementation—this is what we like to call the VAS Difference.

SWIMERS can penetrate all core GP windows, and most 3rd party products we have tested. Unfortunately, there is a somewhat unpredictable situation with some 3rd party products and customizations that we call Poorly Managed Software. PMS almost always prevents SWIMERS from doing their job, so some scenarios will still require manual attention.

When faced with your next validation, come to WilloWare. WilloWare is the only place to get Test Ease with our proprietary SWIMERS. Get Test Ease and get the VAS Difference!