Transforming Test Automation - Scriptless Testing Comes of Age
Questions and Answers
March 3, 2015

Q: What database types do you have for dataDriver today? I.e. Progress Databases?
A: TurnKey provides a data management system using Excel. You can use different data sources, but we highly recommend against that based on the capabilities we've built into Excel and the feature sets we've added. But theoretically it is possible.

Q: Is it safe to say for the databases you have not built accelerators for, will not work us until an adapter is built - I.e. Progress Databases?
A: Accelerators are built for applications and not database platforms. TurnKey provides a scriptless testing framework within HP ALM for functional testing of applications.

Q: Is the testing tools purely based on front-end GUI testing or includes backend testing as well?
A: TurnKey provides a scriptless testing framework within HP ALM for functional testing of applications. Although TurnKey doesn't specifically provide a solution for backend testing since the TurnKey framework is built into the HP ALM platform, other tools provided by HP such as Service Test can be utilized concurrently with TurnKey.

Q: Can this be used for Volume testing?
A: TurnKey provides a functional testing solution which in most cases is not suited for Volume testing. TurnKey recommends using HP Load Runner for any volume or performance testing.

Q: Are the tests and datasheets (Excel workbooks) stored in HP ALM, as well?
A: Yes, they absolutely are. Once you're finished building components and maintaining components you are operating everything inside of HP ALM. We store all projects and datasheets there so you have all the security provisions to govern them. It also helps from a training perspective; you're going to manage testing in the same way as you do today.

Q: How is the product licensed?
Q: What is the licensing model for the Turnkey product?
Q: How does licensing work for this product?
Q: What is the licensing model?
Q: How are the licenses managed?
A: TurnKey has a user-based licensing model. cFactory is sold as a concurrent user-based license. We find that there are onshore and offshore teams that would utilize the software at different times; this type of license provides for flexibility. For the Accelerators, we also offer a concurrent user-based license along with a license for the initial content library.

Q: And how does it compare with $$ for ex UFT?
A:

Q: Rapid development demands impact testing - what are some ways we can "promote" the use of this tool to support that methodology?
A: Scriptless testing supports Agile/rapid development processes much more readily than a manual scripting process. The technology is used to "shift left", moving testing and validation up in the development process rather than simply being a backend post-development process.

Q: We use a third party add-in for UFT to get it to recognize controls that UFT doesn't recognize on its own. Would that be supported with Turnkey?
A: We all have faced this challenge where we have applications and technologies that have certain controls that aren't supported. Our mantra here is if we can recognize the control we can build automation for it. So if you have a 3rd party add-in that you use recognizes the controls, then we can use that to help build application support.

Q: What is the lag time between HP releasing a new version or patch for HP ALM, and Turnkey supporting that release?
A: Generally, we support a new version within 30 days of the product release date.

Q: How does the Excel workbook leverage the HP ALM product?
A: The Excel workbook is automatically built by TurnKey based on the test cases and test sets that are created within HP ALM. Once the workbook is built users build data scenarios which will be used during test execution. Once these workbooks are completed with the necessary data scenarios then they are uploaded into HP ALM and stored at either the test case or test set level.

Q: Can non-Turnkey BPT Components in ALM be used through the Excel workbook along with Turnkey BPT Components?
A: Yes, all BPT components can be configured to work with the TurnKey data management framework.

Q: Can Turnkey BPT Components be used directly in ALM, without using the Excel workbook or the data driver?
A: Yes, although TurnKey recommends the use of dataDriver. This provides added capabilities to help with test execution. By leveraging a smaller number of test cases, the software can help automatically drive the flow of tests and cover a broader range of test scenarios, all without having to write hundreds or thousands of test scripts.

Q: You always mentioned the creation of components, but how we implement/add custom codes when required such as if loop or for loop?
A: TurnKey's data management system has looping capabilities directly built into the data sheets. There is no need to add "code" to handle these scenarios.

Q: Can we get a trial version in order to install?
A: Please contact a TurnKey sales representative at sales@turnkeysolutions.com.

Q: Regarding the auto update - is this done on command (e.g. tell it to look for updates) or is it done on the fly if test component not working?
A: Currently, if we identify a component as not working, we'll use cFactory to bring up the component and perform the maintenance update. What you'll see coming in the near future in our next release is a learned capability. As we execute tests if a component fails, that auto-maintenance happens on the fly and allows you to update the component after execution of the test. Currently, it's performed on-demand; in the future-state it will automatically do the maintenance for you.

Q: Is there a TurnKey accelerator for Oracle E-business suite?
A: Yes, actually our Oracle Accelerator is the first accelerator we released many years ago. It includes a robust library of pre-built business components and pre-built test cases for Oracle EBS. We have more customers using this accelerator than any other.

Q: Does the c-factory tool help in the process of migrating QTP automated testing from Oracle E-business Suite 11i to Oracle E-business Suite R12?
A: As customers upgrade their Oracle E-business Suite they receive the Oracle Accelerator that matches their new version of software. cFactory then provides the ability to update automation content based on customizations made to their applications.

Q: Are the TurnKey products client/server based. Is there an installation needed?
A: cFactory is a desktop application and is installed on the same machine as QTP/UFT.

Q: Is there a way to convert the functional tests to performance tests?

A: HP does not currently provide the ability to convert business process types of tests to performance tests.

Q: Can the master test components be given in any order, or does the order have to match the order in which they are executed?
A: Generally speaking you should order your components in the order that they need to be executed. However the data-driven framework provided by TurnKey does offer the ability to control what gets executed and in what order.

Q: Are there any limits on which web applications can be automatically tested?
A: cFactory supports any application supported by QTP/UFT.

Q: Does turnkey overcome any issues that UFT already has with application under test? If yes, how? Please explain.
A: Yes, TurnKey provides a number of cFactory packages that resolve known issues that QTP/UFT may have with an application type. cFactory extends application/object recognition support.

Q: Does cFactory Mobile run on mobile devices natively, or only in emulated environments? How are generated components exported? Which platforms are supported (Android, IOS, Windows)?
A: The way we test mobile applications is not through an emulator, it's actually done natively. We have a cloud-based solution where you go to website and choose the specific type of device you want to test and then actually physically testing that device. Components are exported through direct HP ALM functionality or can be exported using cFactory. As far as support, we support all of the major mobile operating systems from Android to IOS to Windows.

Q: Do any of the ERP vendors (SAP, Oracle) use your tools to automate their own test scripts?
A: Each of the ERP vendors mentioned above have a proprietary testing solution so of course they do not use the solution provided by TurnKey. Each of these solutions is a point solution for the specific ERP application. TurnKey, however, provides a single automation solution to test more broadly, validating all of your applications and end-to-end processes.

Q: Our vendors use their own testing framework as opposed to record and play back. Is this typical and does this approach typically reduce the maintenance issue of your typical QTP record and playback use of QTP?
A: This sounds like an external vendor that is providing services. Vendors like to use their own testing framework because they like to lock you into their services. They spend a lot of time and hours doing maintenance—those are billable hours and they can bill back as part of their business. Unfortunately, the assets they create/maintain are not reusable, not industry standard, so it becomes difficult if you want to bring the effort in-house or use a different vendor. We recommend not using another vendor's framework if at all possible—this may not always be the case, there are exceptions—but we wouldn't use them frequently.

Our assets are all HP standard, so if you decide to change vendors you can. The assets you have built are HP standard, and you can continue to using them forever. There is nothing TurnKey about the BPT component; it's a standard HP construct. Our maintenance capability is patented and no one else has that. It is specifically designed to add additional automation to reduce your maintenance effort significantly.

Q: Is BPT maintained by HP in the sense that the components are updated for a give application such as SAP as an example?
A: The components are maintained by cFactory. cFactory provides the ability to compare existing business components against the application under test and automatically update them based on the differences that are found.

Q: For SAP I see many change analyzers, CIT, BPCA, etc. How does your change analyzer compare to the aforementioned change analyzers?
A: We think ours is clearly the best. If you are familiar with BPCA (business process change analyzer), it is a complex piece of software. Ours is very simple to install and performs deep analysis. It identifies every test that needs to be run, prioritizes those based on business risk, and then provides gap analysis to tell you what assets are affected that don't have tests, giving you the option to fill them in. It is very powerful, but it is also an integrated solution that ties with ALM and TurnKey SAP Accelerators and does really powerful risk-based testing.

Q: How would you handle pdf sections comparisons with your solution?
A: TurnKey provides a custom add-in for PDF that allows QTP/UFT to identify objects with a PDF document. Once the custom add-in is used cFactory is able to build business components for PDF documents.

Q: Can you look up data across multiple systems when you data drive?
A: Yes, there is no limit to the number of systems that dataDriver can pull from to access data.

Q: I see how this can be great for maintenance, assuming that the implementation is correct. But say, for example, I have a requirement in a release to add Field A to Screen B. I would have to (a) wait until the code is delivered to update what I have available.
I guess my related follow-up would be: how do you plan for testing when your components can't be updated until after the code is delivered? Once the code is delivered, I need to focus on testing rather than planning. How do you demonstrate traceability?
A: Components cannot be updated until cFactory has access to the new version of the application. However, once access is granted maintenance of the components is very efficient. Traceability is provided through functionality provided in HP ALM.

Q: How is your integration with HP Quality Center?
A: When we built our product we built it from day one, completely wrapped inside of HP ALM. So, it isn't just a light integration, but we're completely intertwined and baked in. Our products don't work without the platform in place which emphasizes how tightly connected we are to HP ALM.

Q: Is your product part of the HP unified functional testing suite?
A: TurnKey leverages capabilities within HP ALM and QTP/UFT to provide a scriptless test framework.

Q: How are you different with HPs UFT?
A: TurnKey gives technical and non-technical business users the ability to build automation without having to write a single line of code. It offers drag-and-drop capabilities to help them create test sets; the data-driven technology then executes these tests automatically. Its auto-maintenance features also help to keep test sets up-to-date without having to search through and update numerous scripts.

Q: Support for Progress?
A: As I understand it, Progress is a database platform and would be specifically be supported by TurnKey. TurnKey would support the application that run on the Progress database platform.

Q: We run a Progress back-end, with a framework based on .Net front end controls. Would that work?
A: TurnKey supports an application that is supported by QTP/UFT. .Net is one of the technology that is supported.

Q: If you are not using an enterprise solution, like SAP, Oracle, but have your own home grown internal application, this solution cannot be leveraged?
A: Provisionally yes, and this is very common for us. In fact, many of our customers do not have enterprise or ERP applications. The key is the ability to recognize the objects; if UFT recognizes

the objects in the application then we are covered. If not, we often built application support using extensibility.

Q: What types of technologies is TurnKey capable of augmenting?   Terminal Emulator, Services, Web, Citrix, Mobile, siebel etc..?
A: TurnKey supports any application supported by QTP/UFT.

Q: How can it be maintained if using TurnKey when there are New Features introduced to applications?
A: Typically when new features are introduced in an application cFactory automatically generates the new components. These would then be used to build test cases to validate the new functionality.

Q: How does TurnKey provide support and upgrades that align with UFT versions?
A: TurnKey typically supports new versions of HP ALM and UFT within 30 days of their release.

Q: Do we have to have the BPT installed or licensed today? We have ALM, (no bpt), and UFT.
A: Yes, BPT licenses are required to implement the TurnKey automation solution.

Q: The execution is also stored within alm?
A: Yes, test execution is managed through HP ALM.

Q: Is it possible to check entry/exit criteria before/after a test completes? (Verify a table has a certain entry in it after the test for example)?
A: To answer this question a little more broadly, any form of testing that you can do today with your script-based architecture with an HP ALM, is supported by TurnKey. This includes data validation, positive testing, negative testing, looping, sub-looping, branching, etc. You retain 100% of all the capabilities you have today, we just give you added capabilities.

Q: Would you be able to handle/recognize AJAX components within a page?
A: cFactory components can be configured to work with active content pages, where the contents of the screen change without leaving the page.

Q: What components & versions of HP Software are needed?
A: TurnKey software requires HP ALM, v11 through the latest release of v12.2. The engine executes tests with UFT, requiring v11 and above as well; and, the software needs BPT licenses to run also.

Q: How does cFactory handle customizations?
A: cFactory doesn't really care whether a screen is custom or standard. We use what we call templates to identify what type of technology it is looking at. So as an example, cFactory has a variety of templates for web applications, java applications, etc. When you go to build content for an application you simply select the appropriate template for cFactory to understand what it's looking at. That's how we deal with customizations.

Q: Does cFactory generate test results?
A: cFactory generates components; these components are keyword driven and have specific reporting capabilities within them. So yes, cFactory generates reports which are rendered in HP ALM.