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T-Plan Robot Enterprise Product Information

T-Plan Robot Enterprise is the most flexible and universal black box test automation tool on the market. Developed on generic image based testing principles, Robot is used by individuals and organizations of any size, to improve the overall quality of their applications. Providing a human-like approach to software testing of the user interface, and uniquely built on JAVA, Robot performs well in situations where other tools may fail. As a result of its open and carefully designed architecture, it is simple to adopt, integrate and customize. Watch a video or view the site for a quick introduction.

Major benefits of T-Plan Robot Enterprise include:

- Platform independence (Java). T-Plan Robot runs on, and automates all major systems, such as **Windows**, **Mac**, **Linux**, **Unix**, **Solaris**, and mobile platforms such as **Android**, **iPhone**, **Windows Mobile**, **Windows CE**, **Symbian**.
- Test almost ANY system. As automation runs at the GUI level, via the use of VNC, the tool can automate most applications. E.g. **Java**, **C++/C#**, **.NET**, **HTML** (web/browser), **mobile**, **command line interfaces**; also, applications usually considered impossible to automate like **Flash/Flex** etc.
- Support of Java test scripts as well as a proprietary scripting language.
- Record & Replay capability.
- Support of testing over the RFB protocol (better known as VNC).
- Open architecture with extension interface allows easy customization and integration. E.g. **Optical Character Recognition (OCR),** or **integration with a relational DB via JDBC**.
- Powerful multiple image search allows changing of window layout, button position etc.
- Object search & background detection to detect objects by color, by color range, and on different backgrounds. E.g. **Radar object detection**, **GIS map** testing etc.
- Tight integration with test management products such as T-Plan Professional.

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Supported Configurations for Automation

T-Plan Robot's remote desktop technology is based on the Remote Frame Buffer (RFB, better known as Virtual Network Computing, VNC), where T-Plan Robot acts as a client driving a desktop server, running on a remote, or local host.

VNC software typically operates in a client-server environment where the client and server are physically two different machines, or at least two different OS instances. I.e. Each supported configuration comprises of two systems:

- **The Client System** runs Java and T-Plan Robot. It may be any system supported by Java 1.6 or higher.
- **The System Under Test (SUT)** is a machine running the VNC server, with the Application Under Test (AUT). It may be any system capable of running an RFB 3.3 compliant VNC server.

The VNC technology allows T-Plan Robot to support automated testing of three basic configurations:

Single operating system with multiple desktops. This scenario is limited to Unix/Linux systems, which support running of multiple VNC desktop instances on a single system. The machine in this case serves as both the client system and the SUT.

Single machine with virtual OS instances involves one operating system running T-Plan Robot, with one or more virtual OS instances hosted in a virtual emulator (e.g. VMware, Parallels, VirtualBox, and Virtual PC etc.). In this instance, the virtual systems serve as the SUT. This configuration is suitable for evaluations and small test projects.

Dual machine environment is a classic client-server configuration, consisting of a client machine, and a stable dedicated test server running VNC. This configuration is the recommended option for automation in the majority of test environments.

Instructions on how to install and configure client and test systems are available in the release notes document.

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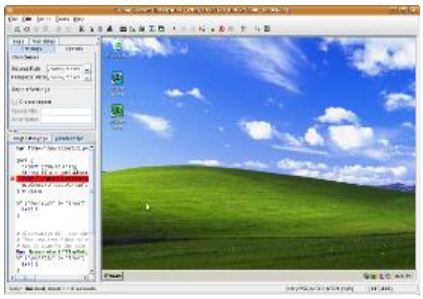
Scripting Features



T-Plan Enterprise features a comprehensive **Java Swing GUI**, which supports user interaction with the connected remote desktop, as well as easy development and maintenance of test scripts.

A complete guide to the GUI is provided in the Help system of the installed product, as well as in the on line GUI reference documentation collection.

T-Plan Robot Enterprise supports two script types:

- **Regular test scripts** rely on the T-Plan Robot Scripting Language. The language is simple, text-based, close to spoken English, and thus easy to understand. Regular test scripts are fully supported by the GUI, and there are several mechanisms to allow the creation of reusable pieces of code (scripted procedures), and to organize them into libraries. Regular test scripts may also contain snippets of Java code (Java code blocks), or even call Java test script classes.
- **Java test scripts**, written in the Java 1.6 programming language, benefit from the advanced Java platform, and a wide range of available libraries. These scripts rely on the T-Plan Robot Java API. Though the use of a Java IDE, such as Netbeans or Eclipse is highly recommended for the development of Java code, T-Plan Robot is able to compile Java source code, and execute it on the fly. Java test scripts may also act as standalone programs (having their own main() method), or they may be called and executed from third party applications.

In addition to manually executing the tests within T-Plan Robot, automatic execution via a Command Line Interface (CLI), is also supported. This functionality allows the execution of T-Plan Robot's scripts, to be integrated into schedulers, and third party applications.

Other Image Based Testing Features:

- **Object search and static image testing**. This functionality targets the testing of imaging systems, such as the GIS (Geographic Information System), and CAD (Computer Aided Engineering).

For more information, please visit the website, or contact us at sales@t-plan.com.