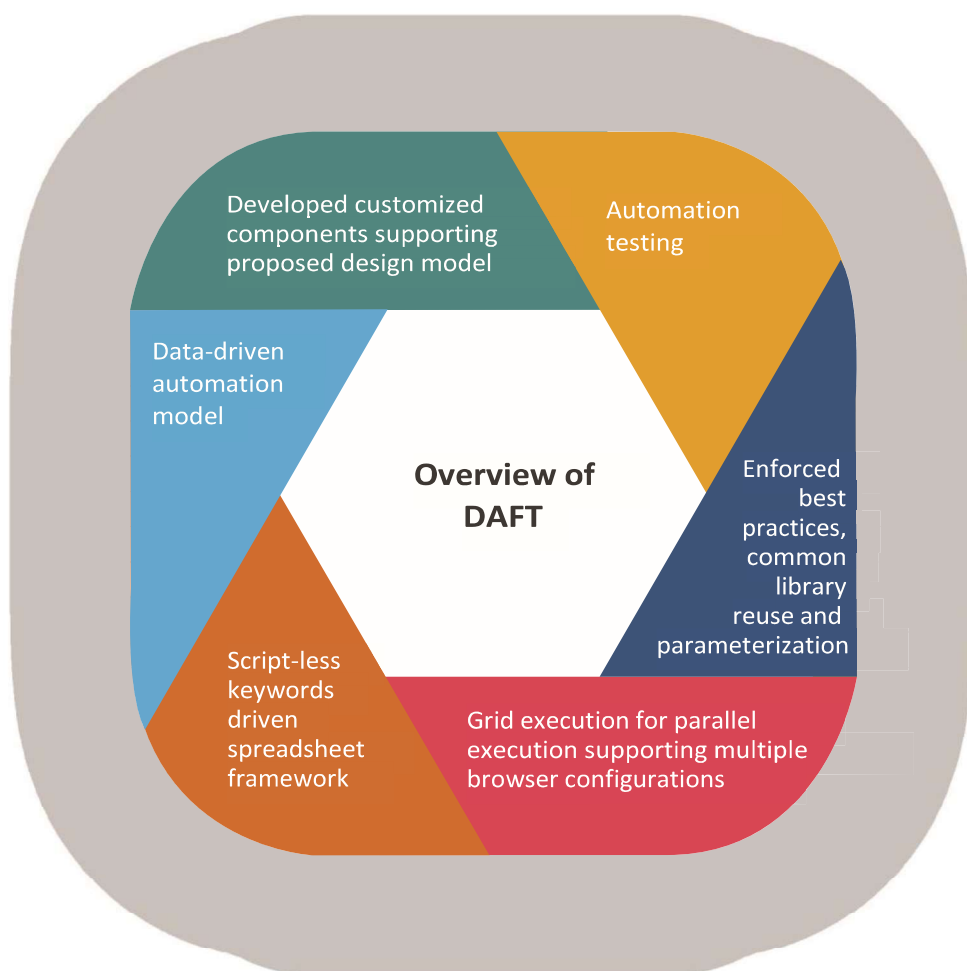# DAFT - Digital Automation Framework for Testing

In today's environment of highly stringent project deadlines, it is imperative to adapt effective testing methods. The high-quality applications can be achieved in shorter sprints with the help of effective automation testing rather than traditional manual testing. With the changing business needs, there is a high pressure on enterprises to deliver robust applications with good quality, reduced cost and high efficiency. However, it is critical to select appropriate Automation tool which fits vast variety of applications like Web, mobile, tablet, desktop and client-server software applications. Thus, enterprises define a concise strategy for automation testing and adopt right tools and frameworks.

With regards to this, the Digital Group introduces **Digital Automation Framework for Testing (DAFT).** DAFT is a comprehensive framework developed by using Selenium. Selenium being open source, there is significant *cost advantage*. DAFT is proposed to choose appropriate automation tools by reducing risk, cost, ROI and increasing efficiency.
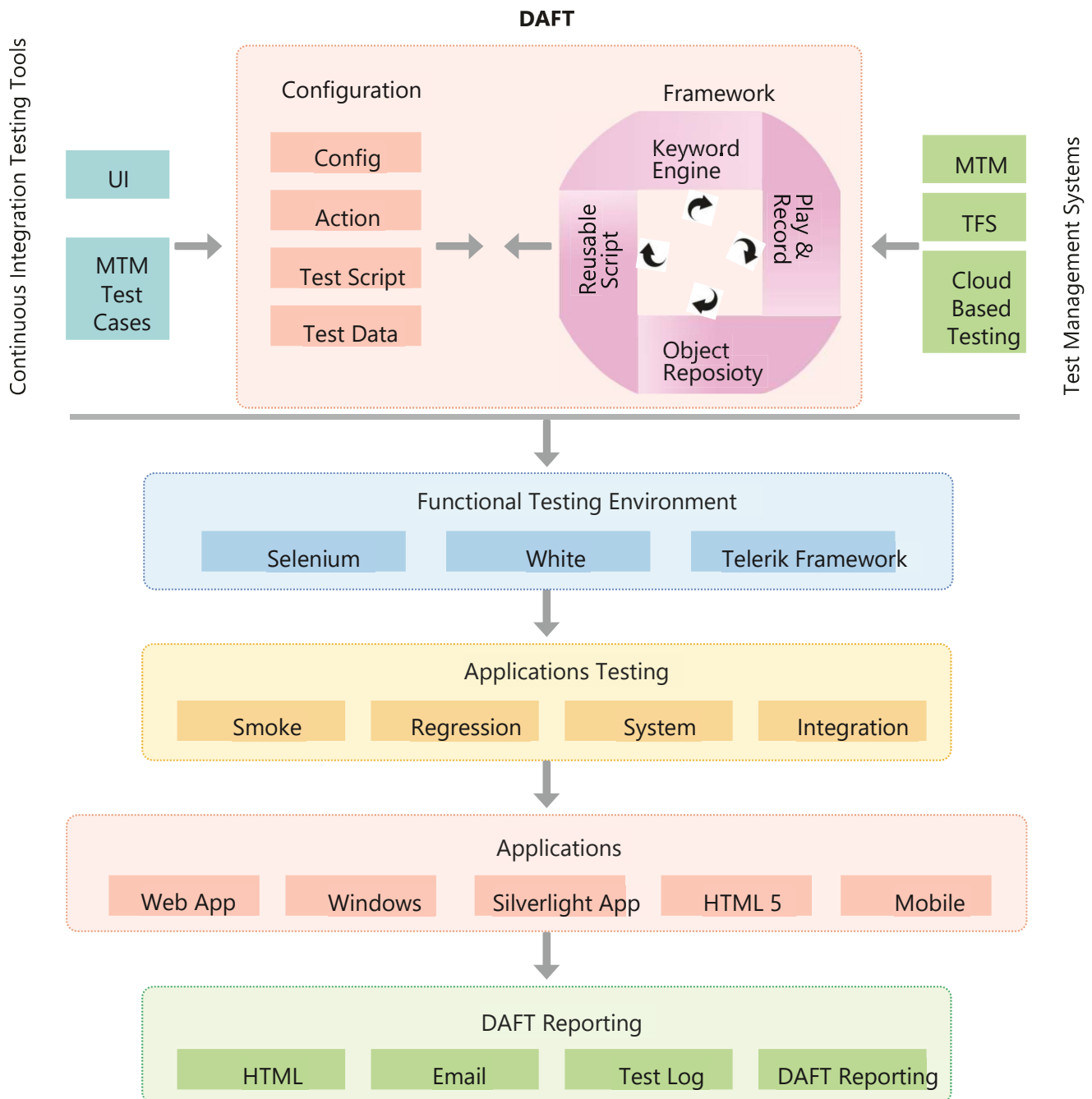
Automation Framework Overview

The effective automation testing is the necessity of every organization to enhance application performance. Certainly it is not feasible to use manual testing procedures where most of the enterprises prefer applications in agile methodology. At the same time, it is challenging to select automation tool or develop frameworks for a wide range of applications.

DAFT is a customized platform that facilitates to select appropriate automation tool, evaluate suitable framework, build the proof of concept, develop automation framework and execute tests. Indeed, Digital Automation Framework for Testing (DAFT) is Digital Group's automation software that provides open platform for easily creating, maintaining and executing automated tests for desktop, web, hand-held devices and client-server software applications.

Developed customized components supporting proposed design model

Automation testing

Data-driven automation model

Overview of DAFT

Enforced best practices, common library reuse and parameterization

Script-less keywords driven spreadsheet framework

Grid execution for parallel execution supporting multiple browser configurations

Automation Framework Architecture

DAFT

Continuous Integration Testing Tools

Configuration

- Config
- Action
- Test Script
- Test Data

Framework

- Keyword Engine
- Play & Record
- Reusable Script
- Object Reposioty

UI

MTM Test Cases

MTM

TFS

Cloud Based Testing

Test Management Systems

Functional Testing Environment

| Selenium | White | Telerik Framework |

Applications Testing

| Smoke | Regression | System | Integration |

Applications

| Web App | Windows | Silverlight App | HTML 5 | Mobile |

DAFT Reporting

| HTML | Email | Test Log | DAFT Reporting |

Key Features

Enterprise Automation UI
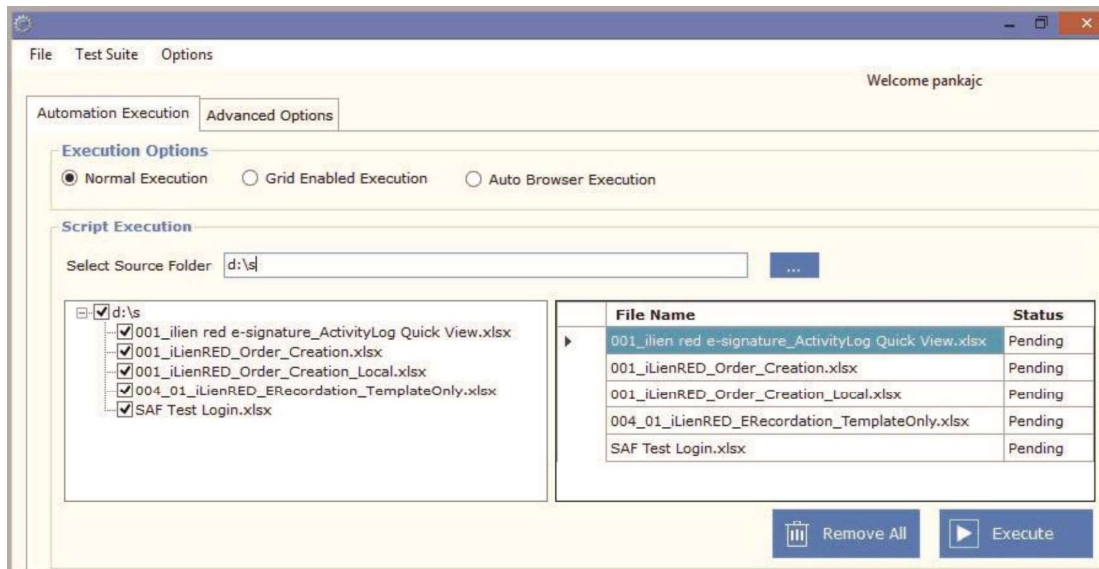
Multiple browsers support

Enterprise Automation Framework™
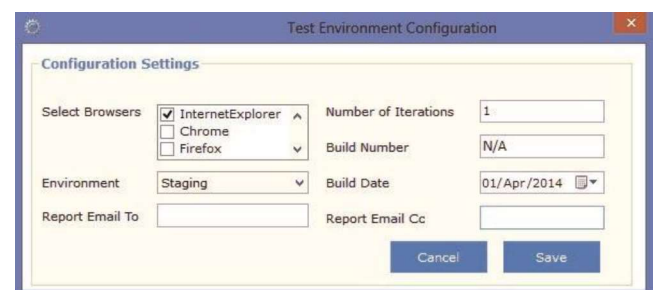
Reporting- Plain Records and Email Reports

CT

Automation Test Center of Excellence (ATCoE) Summary Execution Report

SR.NO.	SUMMARY OF TEST.	TEST ENVIRONMENT	GRID MODE	BUILD NO.	BUILD DATE	START TIME	END TIME	TOTAL TIME	TOTAL TESTCASES	PASSED TESTCASES	FAILED TESTCASES	TEST SUMMARY CHART (%)
1	Summary of Test	Staging	False	N/A	01/Apr/2014	6/12/2015 2:25:46 PM	6/12/2015 2:26:50 PM	00 Hr.(s) 01 Min(s) 05 (Sec)	4	3	1	Fail : 1 Pass : 3
Total	1							00 Hr.(s) 01 Min(s) 05 (Sec)	4	3	1	Fail : 1 Pass : 3

Our Automation Framework is loaded with features. Some of them are listed below:

- Automation Spreadsheets
- Object Identification & Object Repository
- Parameterization
- Embedded spreadsheets
- Grid configuration for parallel execution
- DAFT with Browser Stack Support

Benefits

Our DAFT framework reduces the testing cycle times, long regression hours and eventually improves quality of testing. Our grid configuration for parallel execution feature facilitates multiple test execution simultaneously and hence saves a lot of time and efforts. In addition to this, DAFT has tremendous benefits, which are as follows:

- Automates web, desktop, mobile, client-server and database applications.
- Reduced dependencies on SME's and tool experience.
- Keyword Driven Framework with user friendly keywords.
- Reduced test data setup time.
- Increased quality and reliability; reduced defects and faster time to market.
- Faster realization of ROI.
- Increased flexibility to reach multiple target devices and browsers.
- Significant cut down in Regression and Integration test cycles.
- Reduced (nearly 60%) manual regression, testing efforts and risk
- Early defect identification due to parallel execution.

About TCS