NIIT technologies

Automation Testing Tool for Web Based Products

Why need an Automation Tool?

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Do I have a tool which can help me identify broken builds ASAP?

Do I have any tool which can give me failure email alerts so that I can make quick decisions?

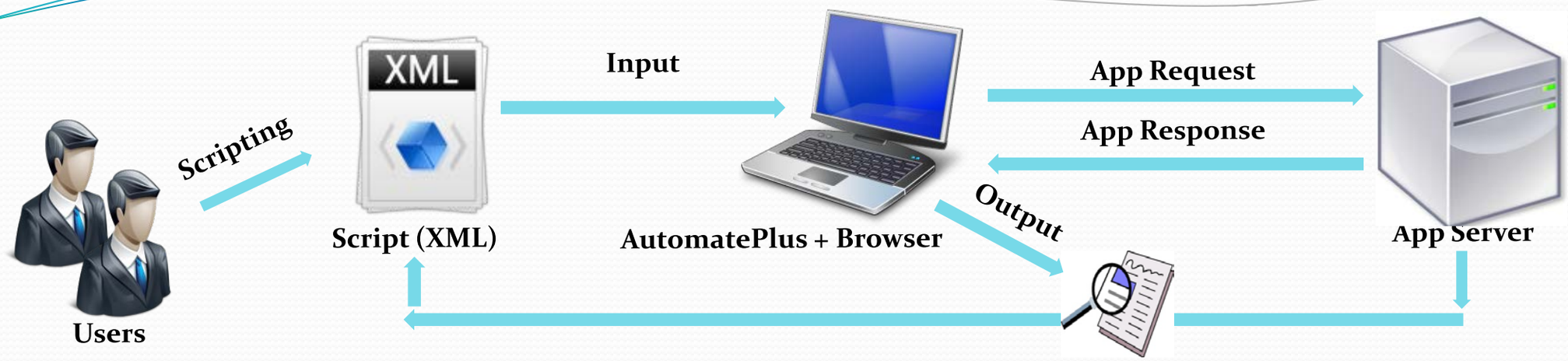
Do I have a tool which is absolutely free-of-cost?

Changes happening in agile mode. How to regression test product in a short span of time?

Do I have a tool to run the smoke tests in quick time once the build is deployed?

Do I have an automated tool with source code, so that I can enhance it in-house ?

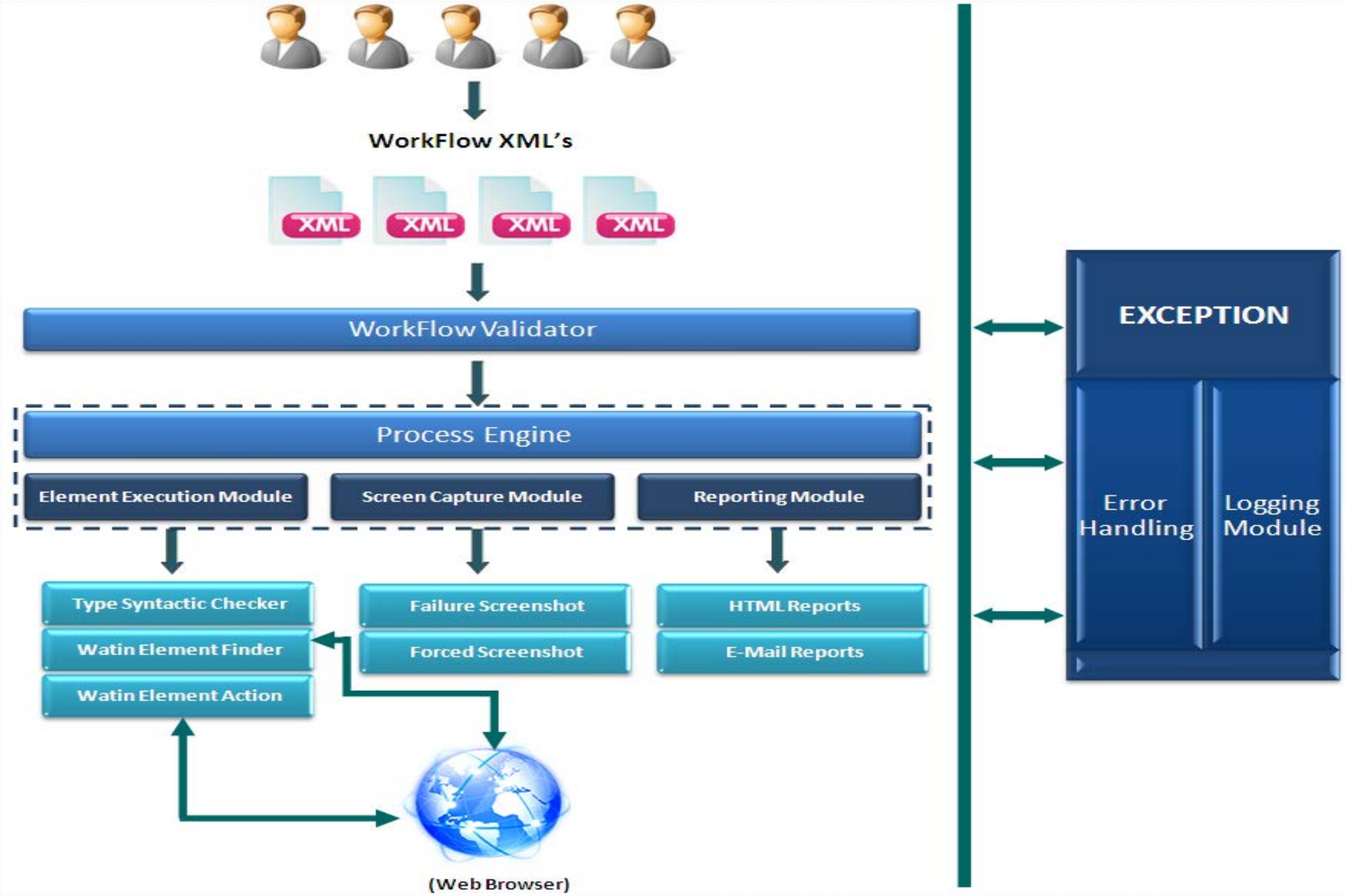
AutomatePlus Tool



AutomatePlus is a tool to automate testing for web-based products. It provides easy scripting (using XML) for resources having very limited automation knowledge. It is a in-house developed tool for effective Unit, Regression and Smoke Testing

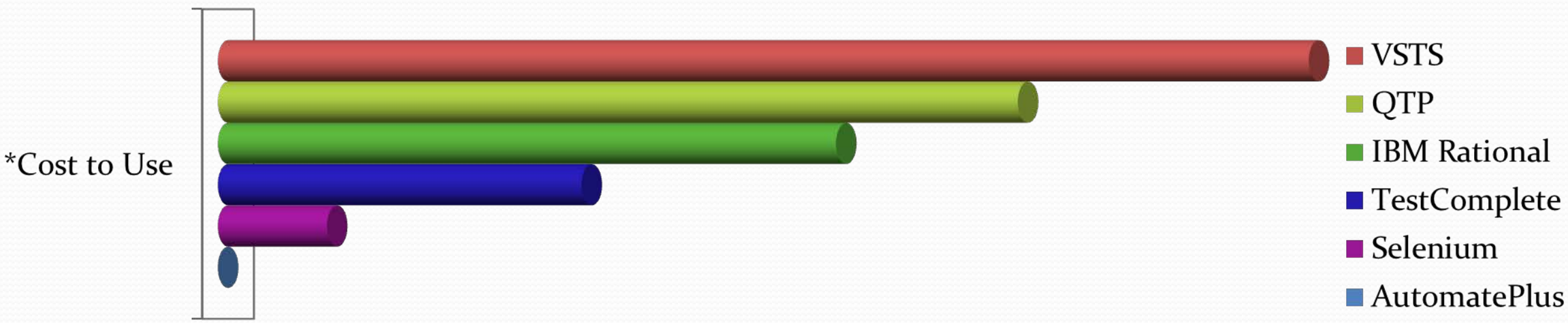
- **Light weight, easy to use & install**
- **Easy to automate testing. It just needs a simple XML script to run automated tests**
- **Easy to maintain as the XML scripting is code independent**
- **Runs based on the catalog file and can have multiple workflows**
- **Can be used for volume testing and iterate workflows with configurable setting**
- **Uses open source Watin (.NET library) in core to process all the elements**
- **Can capture screenshots of browser pages during the test**
- **Can send email alerts for success or failure for the test**
- **Provides good reporting interface for details**

AutomatePlus Architecture



Automation Tools Comparison

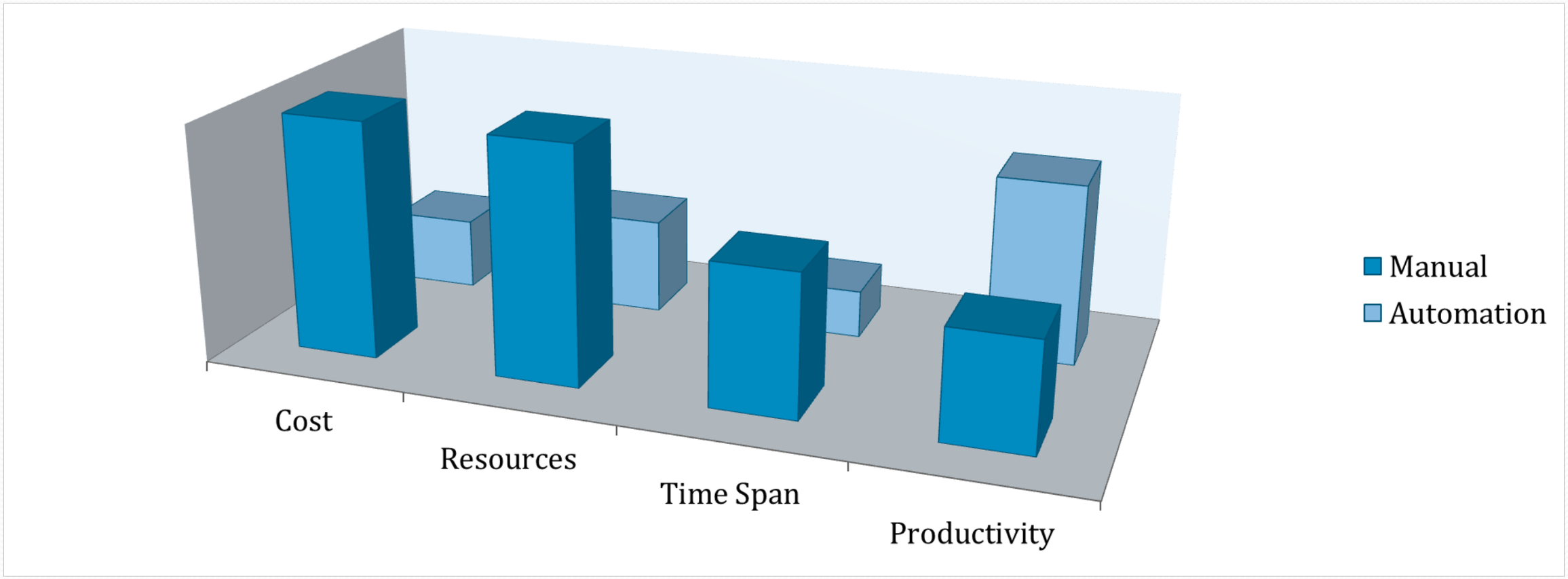
Product / Features	AutomatePlus	Selenium	TestComplete	IBM Rational	QTP	VSTS
Vendor	In-Built	Open-Source	SmartBear	IBM	HP	Microsoft
Version	1.0	2.6	9.0	8.3	11.0	2010
Used For	Unit, Functional Testing	Unit, Functional Testing	Functional, DB Testing	Functional Testing	Functional Testing	Unit, Functional Testing
License Based	No	No	Yes	Yes	Yes	Yes
Scripting Language	XML	JavaScript, Java, Ruby, Perl	VBScript, DelphiScript, JScript	JavaScript, VBScript	VBScript	C# language
Size on Disk	5 MB	2-4 GB	700 MB	750 MB	700 MB	3-4 GB
Browser Supported	IE, FF	IE, FF, Chrome, Safari	IE, FF, Chrome, Netscape	IE, FF	IE, FF	IE, FF, Chrome



*License Fee + Environment Setup Cost

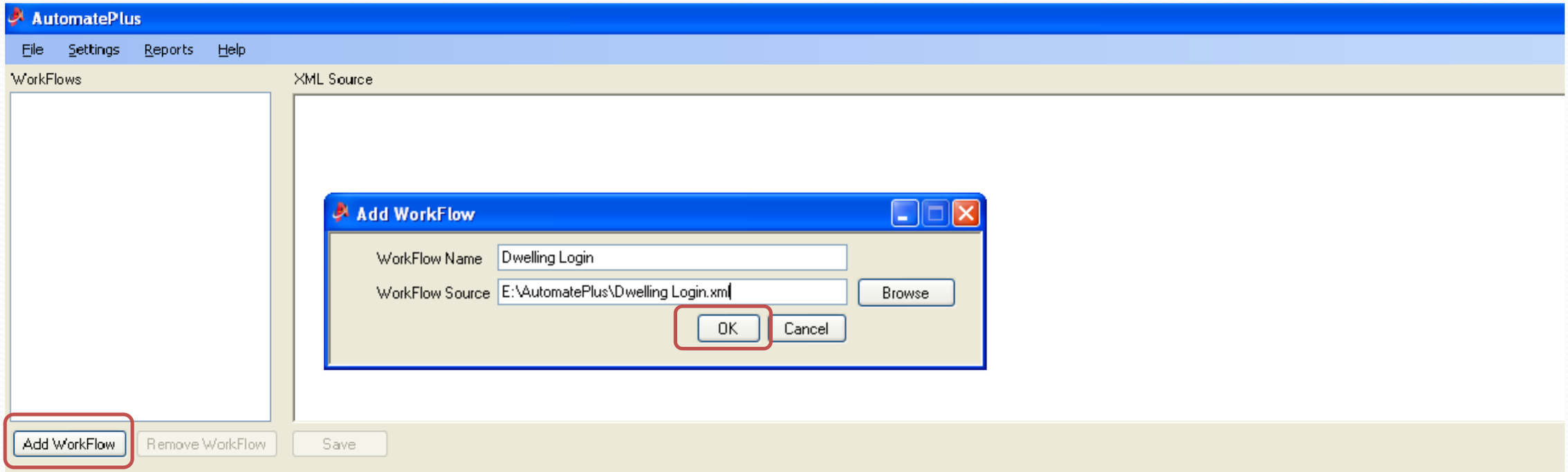
Tool Benefits

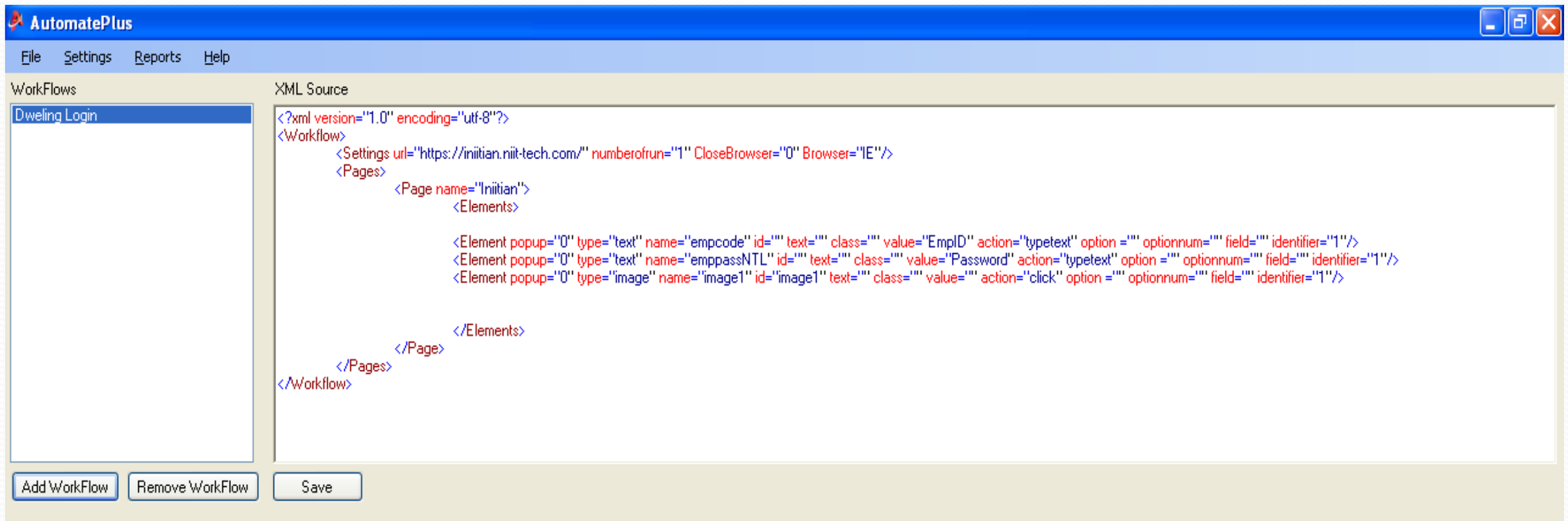
- Reduces Cost and Risk associated with manual execution.
- Automation provides options and opportunities enhancing resource capabilities and to improve productivity
- The tool has a summarized/detailed view of the report. Summarized view presents the overall picture of the process flow. Detailed view presents the success/failure of individual elements.
- The tool provides an email alert of success/failures and helps the stake holders to take decisions on the fly.
- While a workflow created manually is taking 8 minutes, the workflow created using the tool takes just 4 minutes. This means a 50% time gain for each workflow.
- Improves test execution productivity of the regression/smoke tests.



Adding new Workflow

Click on “Add Workflow”





Test Execution Started

Click on “Start Execution”

AutomatePlus

File Settings Reports Help

WorkFlows

- Dwelling Login
- Dwelling
- Auto Login
- Auto
- HomeOwners Login
- HomeOwners Before Referral
- HomeOwners After Referral

XML Source

```
<?xml version="1.0" encoding="utf-8"?>
<Workflow>
        <Settings url="http://172.17.122.66/express/default.aspx" numberofrun="1" CloseBrowser="0" Browser="IE"/>
        <Pages>
                <Page name="Login">
                        <Elements>
                                <Element popup="0" type="text" name="_username" id="username" text="" class="" value="johnagent" action="typetext"
option ="" optionnum="" field="" identifier="1"/>
                                <Element popup="0" type="text" name="_password" id="password" text="" class="" value="password" action="typetext"
option ="" optionnum="" field="" identifier="1"/>
                                <Element popup="0" type="link" name="home" id="" text="" class="" value="" action="click" option ="" optionnum=""
field="" identifier="1"/>
                        </Elements>
                </Page>
        </Pages>
</Workflow>
```

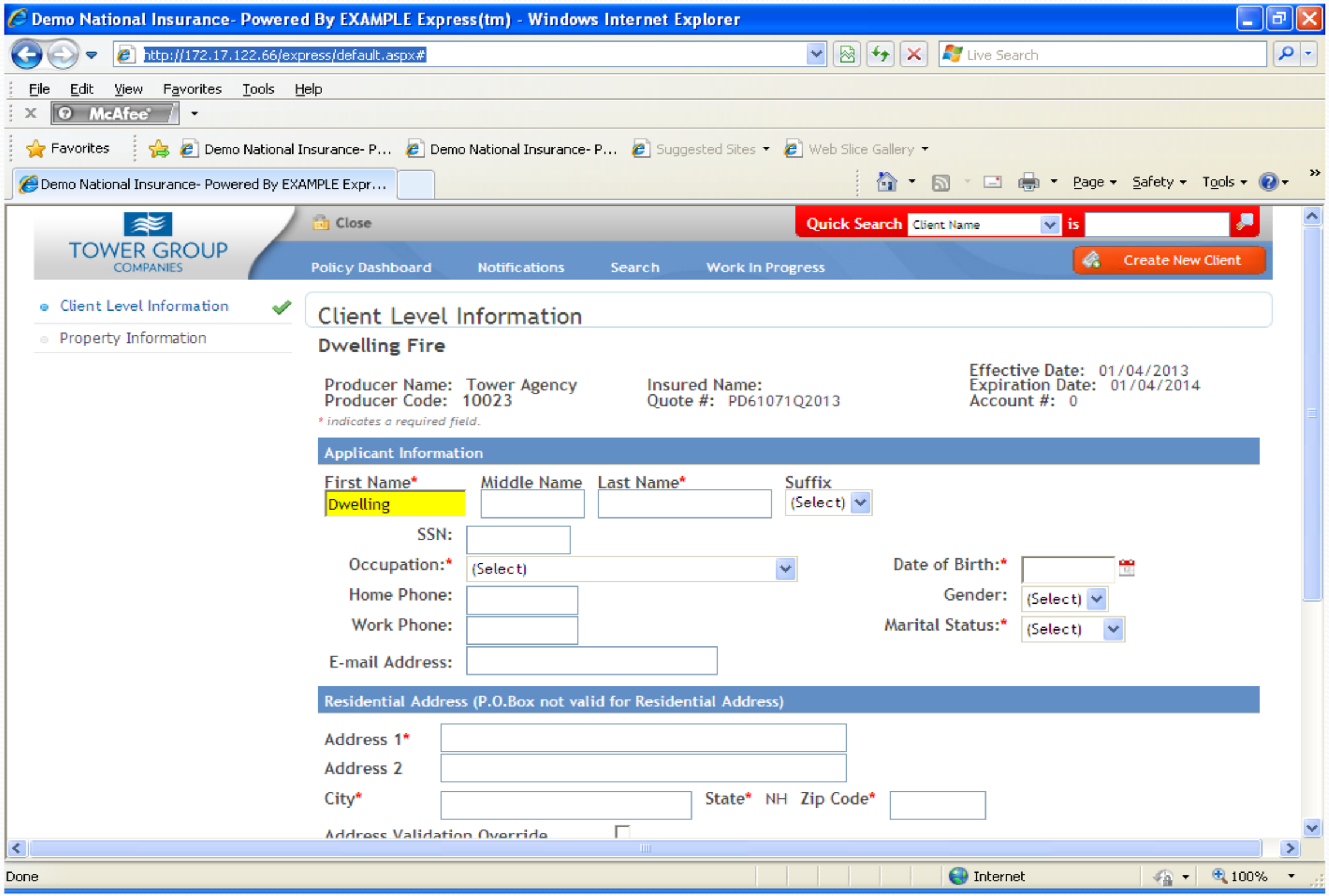
Add WorkFlow | Remove WorkFlow | Save

Start Execution | Stop Execution

Log Monitor

```
----------Execution Starts at 1/4/2013 3:41:06 PM----------
----------Processing WorkFlow Started  WorkFlow: Dwelling Login----------
---------- Workflow XML Validated Successfully ----------
---------- Run Count Currently Executed : 1----------
----------Web Application Started----------
----------Currently Executing Page: Login----------
----------Currently Executing Element having ID: username ----------
----------Currently Executing Element having ID: password ----------
----------Currently Executing Element having Name: home ----------
----------Execution WorkFlow Completed at 1/4/2013 3:41:17 PM----------
----------Processing WorkFlow Started  WorkFlow: Dwelling----------
---------- Workflow XML Validated Successfully ----------
---------- Run Count Currently Executed : 1----------
----------Currently Executing Page: Client Level Information----------
----------Currently Executing Element having ID: id_New ----------
----------Currently Executing Element having Name: string_F3_1 ----------
----------Currently Executing Element having Name: string_F4_2 ----------
----------Currently Executing Element having Text: Next  ----------
----------Currently Executing Element having Name: string_4 ----------
```

Application Under Test



Test Execution Completed

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AutomatePlus

File Settings Reports Help

WorkFlows

- Dwelling Login
- Dwelling
- Auto Login
- Auto
- HomeOwners Login
- HomeOwners Before Referral
- HomeOwners After Referral

XML Source

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                        <Elements>
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action="typetext" option ="" optionnum="" field="" identifier="1"/>

                                <Element popup="0" type="text" name="_password" id="password" text="" class="" value="password" action="typetext"
option ="" optionnum="" field="" identifier="1"/>
                                <Element popup="0" type="link" name="home" id="" text="" class="" value="" action="click" option ="" optionnum=""
field="" identifier="1"/>


                        </Elements>
                </Page>
        </Pages>
</Workflow>
```

Add WorkFlow | Remove WorkFlow | Save

Start Execution | Stop Execution

Log Monitor

```
----------Currently Executing Element having Name: string_28E ----------
----------Currently Executing Element having Name: string_294 ----------
----------Currently Executing Element having Name: string_297 ----------
----------Currently Executing Element having Name: string_2C2 ----------
----------Currently Executing Element having Name: string_2C5 ----------
----------Currently Executing Element having Name: string_2C6 ----------
----------Currently Executing Element having Name: string_2C7 ----------
----------Currently Executing Element having Name: string_2C8 ----------
----------Currently Executing Element having Text: Next ----------
----------Currently Executing Wait for 20000  milliseconds----------
----------Currently Executing Page: Bind----------
----------Currently Executing Element having Text: Bind/Issue ----------
----------Currently Executing Wait for 20000  milliseconds----------
----------Currently Executing Element having Name: string_8 ----------
----------Currently Executing Element having Name: string_C_1 ----------
----------Currently Executing Element having Text: Submit Payment ----------
----------Currently Executing Wait for 20000  milliseconds----------
----------Execution WorkFlow Completed at 1/4/2013 4:35:39 PM----------
----------Execution Completed at 1/4/2013 4:35:39 PM----------
```

Test Execution Report

Click on desired row for detailed view

Report Viewer

	File Name	Execution Completion Time	Path
▶	ExecutionReport - 7120131852.html	1/8/2013 2:50:24 PM	E:\AutomatePlus Application\Reports\ExecutionReport - 712013
	ExecutionReport - 7120131786.html	1/8/2013 2:50:24 PM	E:\AutomatePlus Application\Reports\ExecutionReport - 712013

E:\AutomatePlus Application\Reports\ExecutionReport - 912013182149.html - Windows Internet Explorer

E:\AutomatePlus Application\Reports\ExecutionReport - 912013182149.html

Live Search

File Edit View Favorites Tools Help

McAfee

Favorites | Demo National Insurance- P... | Demo National Insurance- P... | Suggested Sites | Web Slice Gallery

E:\AutomatePlus Application\Reports\ExecutionRepor...

Page | Safety | Tools

Test Execution Report

Execution Started : Wednesday, January 09, 2013 6:21:35 PM

Execution Objects	Status
WorkFlow Name : Login	Success
Number of Run : 1	Success
Page Name : Login	Success
Element having ID: username	Success
Element having ID: password	Success
Element having Name: home	Success

Execution Completed : Wednesday, January 09, 2013 6:21:49 PM