

Автоматизация тестирования: 3+7 аргументов в пользу TestComplete



Геннадий Алпаев

Ciklum

QA

Dnepropetrovsk
community



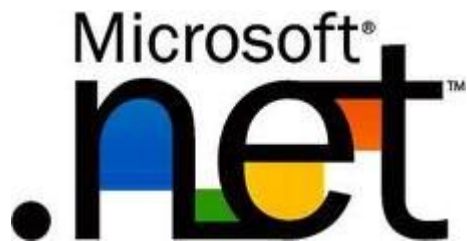
Сообщество Тестировщиков
Днепропетровска

Почему TestComplete?

3 главных причины:

- *поддерживаемые технологии*
- *стоимость*
- *техподдержка*

TestComplete – Поддерживаемые технологии



Borland
(A MICRO FOCUS COMPANY)
Delphi/C++ Builder



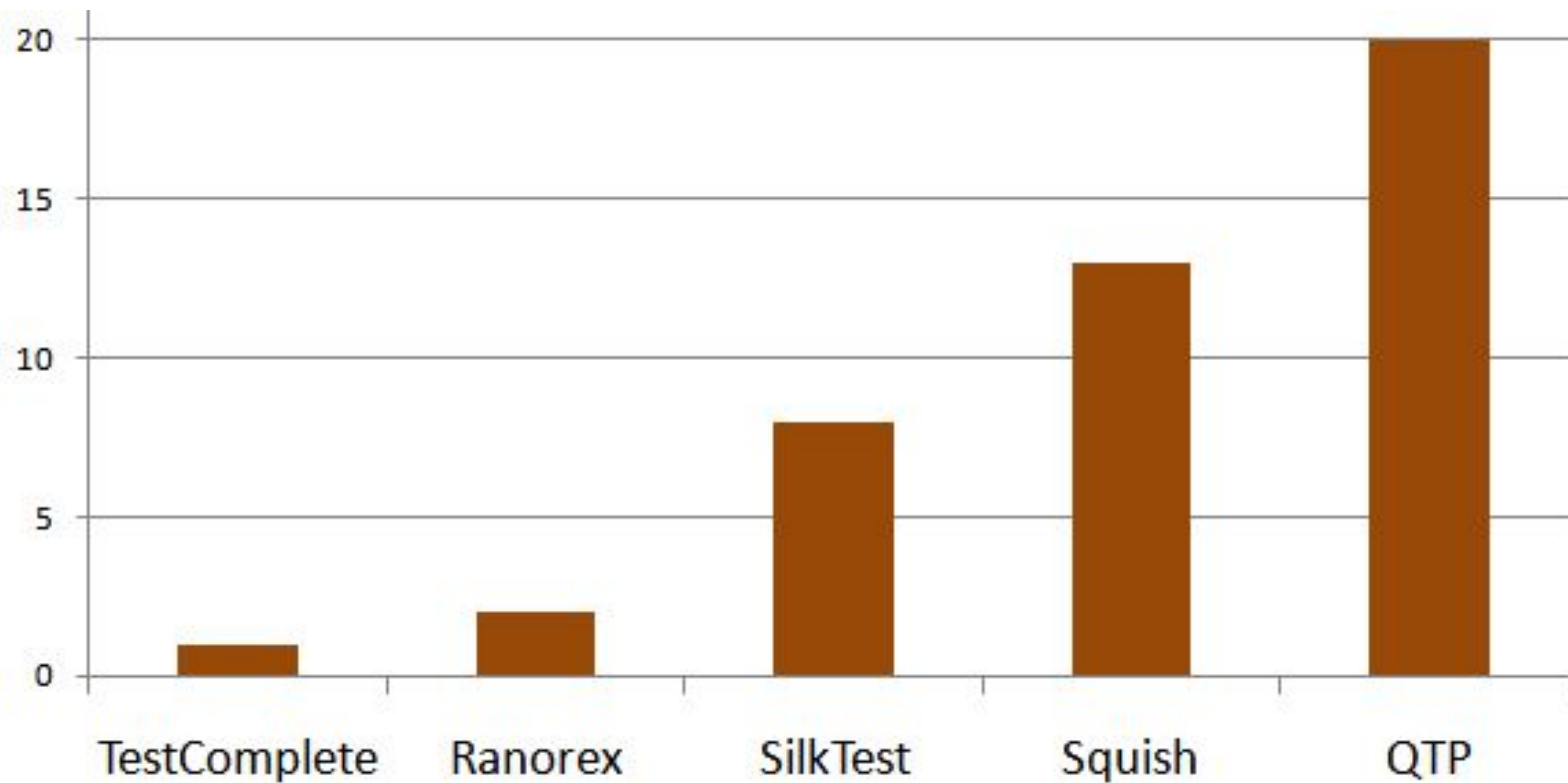
MS Visual C++ 6.0 – 10.0

32-bit
Vs.
64-bit


 Sybase
Power Builder



TestComplete – СТОИМОСТЬ



TestComplete –

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<http://smartbear.com/products/qa-tools/automated-testing/info/>

[TestComplete Awards](#)
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<http://tv.falafel.com/TestComplete.aspx>

<http://tctutorial.ru/>

<http://smartbear.com/forums>

<http://www.sqaforums.com/>

<http://software-testing.ru/forum/>



QA

Dnepropetrovsk 
community

3+7 аргументов в пользу TestComplete

Почему TestComplete?

7 неглавных причин:

- XML-лог и экспорт лога
- (HTML/MHT)
- Поддержка различных языков программирования
- Поддержка сторонних компонентов
- разные структуры приложений
- интеграция через OLE
- Нагрузочное тестирование Web-приложений
- расширение с помощью SDK и Extensions

TestComplete – XML лог и экспорт лога

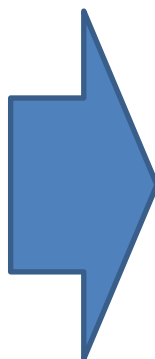
```
function TestExample1()
{
  StartTC("Demo testcase #1");
  IC("Initialization");
  Log.Message("Initialization (preparing app");
  EndIC("End initialization");

  Step("Do something crazy");
  Log.Event("Click something, enter text, mc");
  Log.Warning("Warn user about his/her stupidity");
  EndStep("Something happened");

  Step("Do something else");
  Log.Picture(Sys.Desktop.Picture(), "Show screenshot");
  Log.Message("Log another message");
  EndStep("Something went wrong");

  Step("Do something stupid");
  Log.Error("Application crashed");
  EndStep("Application should crash");

  EndTC();
}
```



Type	Message	Time
✖	*** Starting testcase 'Demo testcase #1' ***	1:49:47
+	***Initial condition: 'Initialization'	1:49:47
+	***End initialization	1:49:47
+	***Step #1: 'Do something crazy'	1:49:47
+	Click something, enter text, modify data and pray	1:49:47
+	Warn user about his/her stupidity	1:49:47
+	Link to the tutorial	1:49:47
+	***Expected: 'Something happened'	1:49:47
+	***Step #2: 'Do something else'	1:49:47
+	Show screenshot	1:49:48
+	Log another message	1:49:48
+	***Expected: 'Something went wrong'	1:49:48
+	***Step #3: 'Do something stupid'	1:49:48
+	Application crashed	1:49:48
+	***Expected: 'Application should crash'	1:49:48
+	*** Starting testcase 'Demo testcase #2' ***	1:49:48
+	*** Starting testcase 'Demo testcase #3' ***	1:49:48

TestComplete – ЯЗЫКИ ПРОГРАММИРОВАНИЯ



- JScript (C++/C# Script)
- VBScript
- DelphiScript



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- C#
- C++
- VB .NET
- VB 6.0
- Delphi

OLE



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TestComplete – сторонние КОМПОНЕНТЫ



TestComplete – OLE-интеграция



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- работа с OLE-объектами в TestComplete
- вызов скриптовых функций через OLE
- работа с TestComplete через OLE

TestComplete – нагрузочное тестирование Web

The screenshot displays the TestComplete interface for a web load test. It is divided into three main sections: Users, Connections, and Requests, each with a graph and a data table.

Users Panel

Graph: Y-axis is Time (s), X-axis is #. The graph shows a step-like increase in time as the number of users increases from 0 to 24.

#	State	Virtual User	Task	Workstation	Time (s)	Connect...
18	Warning	Yandex User (9)	Task 1 - ya.ru	Master Workstation	8.20	30
19	Warning	Yandex User (7)	Task 1 - ya.ru	Master Workstation	8.22	30
20	Warning	Yandex User (10)	Task 1 - ya.ru	Master Workstation	8.23	30
21	Warning	Yandex User (5)	Task 1 - ya.ru	Master Workstation	8.25	30
22	Warning	Yandex User (8)	Task 1 - ya.ru	Master Workstation	9.92	30
23	Warning	Yandex User (2)	Task 1 - ya.ru	Master Workstation	9.94	30
24	Warning	Yandex User (6)	Task 1 - ya.ru	Master Workstation	11.03	30

Connections Panel

Graph: Y-axis is Time (s), X-axis is #. The graph shows a sharp spike in time around 15 users, followed by a decrease and another spike around 25 users.

State	Host	Initi...	R...	Ti...	T...	T...	St...	Per...	St...	Re...	Mi...	Ma...	
OK	suggest.yandex.ru	80	0.05	5	1.30	1.54	1.86	0.06	2.69	19:15...	0.44	0.08	0.09
OK	suggest.yandex.ru	80	0.11	4	1.01	1.30	1.49	0.20	2.82	19:15...	0.38	0.09	0.09
OK	yandex.ru	80	0.05	1	0.14	0.69	0.41	1.38	8.04	19:15...	0.09	0.09	0.09
OK	yandex.ua	80	0.03	1	0.17	0.72	0.43	1.55	6.88	19:15...	0.14	0.14	0.14
OK	pass.yandex.ua	80	0.05	1	0.19	0.20	0.54	1.73	4.01	19:15...	0.14	0.14	0.14
OK	pass.yandex.ru	80	0.06	1	0.19	0.63	0.49	1.94	6.12	19:15...	0.13	0.13	0.13
OK	pass.yandex.ua	80	0.05	1	0.19	0.20	0.92	2.16	6.17	19:15...	0.14	0.14	0.14

Requests Panel

Graph: Y-axis is Request Tim..., X-axis is #. The graph shows a steady increase in request time from 0 to 4 requests.

#	State	Req...	Byte...	Resp...	Byte...	Perf...	Req...	Resp...
0	OK	0.00	0.37	0.08	0.38	9.54	0.00	4.82
1	OK	0.00	0.37	0.08	0.41	10.04	0.00	5.30
2	OK	0.00	0.37	0.09	0.25	6.65	0.00	2.69
3	OK	0.00	0.38	0.09	0.26	6.71	0.00	2.72
4	OK	0.00	0.38	0.09	0.24	6.61	0.00	2.59

Headers Panel

```
GET /suggest-ya.cgi?ct=text/html&part=te
&v=2 HTTP/1.1
Host: suggest.yandex.ru:80
User-Agent: Mozilla/5.0 (Windows; U;
Windows NT 5.1; en-US; rv:1.9.1.7)
Gecko/20091221 Firefox/3.5.7
Accept: */*
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset:
ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 300
Connection: keep-alive
```

TestComplete – SDK и Script Extensions

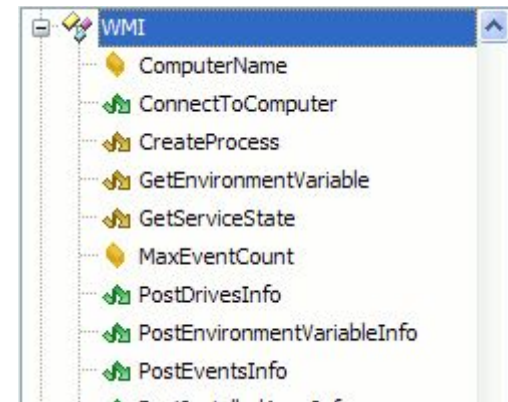
<http://smartbear.com/support/downloads/testcomplete/sdk/>

TestComplete SDK

TestComplete SDK allows developers and testers to create pl TestComplete, such as .NET and WPF control support mod items. The SDK is available as a **free download**.



Script Extensions (JScript, VBScript)



TestComplete – и, наконец, «Разное»

- поддержка различных систем контроля версий
- разнообразие встроенных функций
- широкие возможности работы с графикой (включая OCR)
- создание скриншотов для каждого шага
- распределенное тестирование
- NameMapping/Aliases
- TestRecorder
- подробная документация с примерами и FAQ
- куча настроек для удобства работы

TestComplete – заключение

Существует ли инструмент для
автоматизации тестирования лучше чем
TestComplete?



Спасибо за
внимание!

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