CONTINUOUS TESTING WITH JUBULA

WHERE THE RUBBER MEETS THE ROAD!

by Markus Tiede



AGENDA

What's Jubula?
Why automation & continuous testing?

CI scenarios in theory ... and in Hudson

THAT'S JUBULA!



UI automation @ eclipse.org/jubula since 2011 GUIdancer "Core" since 2004

JUBULA FEATURES

code-free end-to-end testing keyword based & huge library

cross UI-toolkit SWT/RCP/GEF (e3 & e4) + Swing + HTML

cross-platform
Windows, Linux & Mac OS X

continuous integration tools testexec, autagent, dbtool, autrun

WHY AUTOMATE UI TESTS & INTEGRATE CONTINUOUSLY?



build safety net

THE ITE

Integrated Testing Environment daily test specification & result analysis

DEMO!

THAT'S HUDSON!



continuous integration tool @ eclipse.org/hudson

HUDSON FEATURES

(super)-easy setup
central "dashboard" web-app
job scheduling
job distribution
result processing

CT TOOLS USED

Jubula 2.0.0 - standalone version
Hudson 3.0.0 - plugin bundle WAR
Jubula-CI ANT scripts
ANT 1.8.2

STEPS TO TEST CONTINUOUSLY

build AUT

having a CI is recommended but not mandatory

deploy / install & configure AUT

using a well-defined & stable environment is recommended

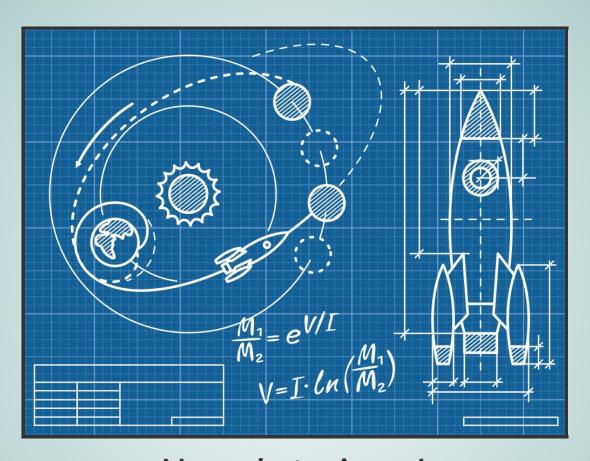
start & test AUT

process & analyze results

reaction is necessary



COMPLEXITY



No rocket science! ... but there are analogies ;-)

START & TEST AUT - JUBULA CT TOOLS

autagent

starts & remote-controls AUT

testexec

provides & processes test execution information drives the AUT-Agent » AUT stores tests & results in database embedded H2, Oracle, MySQL, PostgreSQL

[autrun] launch multiple AUTs externally [dbtool] im- & export test projects within CI

START & TEST AUT - STANDARD WORKFLOW

1. start autagent on test machine

2. start testexec loads tests from database

3. testexec » autagent: "start & wait for AUT" via AUT configuration

4. test suite execution documents all events / steps

5. testexec provides test result in database & file-system

START & TEST AUT - WORKFLOW

highly customizable 35+ parameters

default layout / test execution

Jubula-CI ANT scripts

dbURL, project name, AUT-name, test result directory

naming conventions

AUT-configuration: ci.\${os.arch}.\${os.name} Test Suite names: \${AUT-name}-FULLTEST

DEMO!

START & TEST AUT IN HUDSON

execute ANT script

cross-platform

use build trigger timer (nightly execution), SCM change, ...

execute on hudson slaves test distribution

DEMO!

THANK YOU! - Q&A?

