

Automated System Testing

Computer System Lab

2008-2009

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What is it exactly?

- Automated Testing

- Manual Testing

Purpose

Why is it needed?

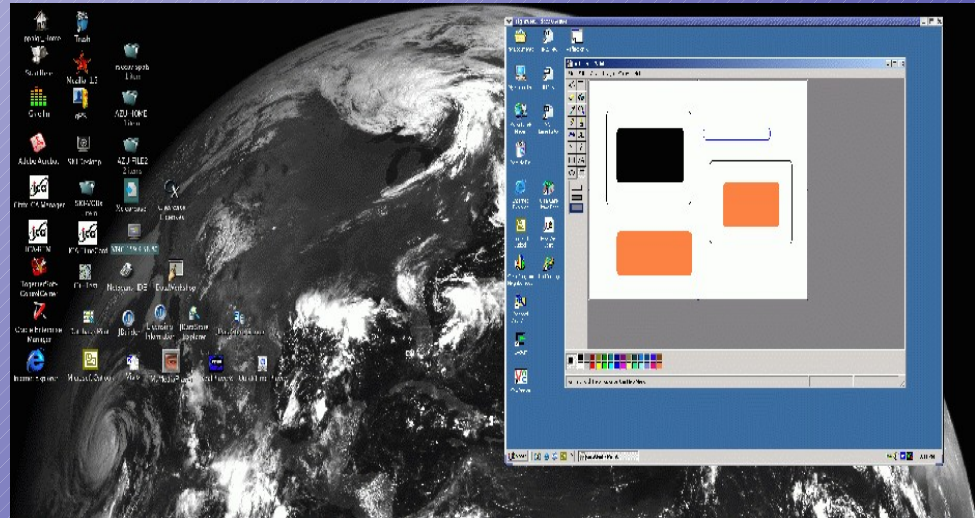
-Time!

-Manual Testing vs. Automated Testing



Applications

- TightVNC
- VNCRobot
- VNC Environment



How?

- One Client System and One Sever System
- What is a Client?
- What is a Server?

How? (Cont.)

- Automation using VNCRobot and TightVNC
- Preparing Client to remotely test Server

Expected Results

- Reduced Testing Time: from hours of manual testing to minutes in automated testing
- Only one system controlling many others

Simple Tests

-Word processor

-Web browser

Main Test

-SeaClear

-Manual Test

-Automated Test

Analysis

- SeaClear
- menus
- values
- etc.

The screenshot shows a software interface for AIS (Automatic Identification System) data. On the left, a window titled "AIS Target Info" displays the following details for a vessel:

UTC:	10/8/2005 10:31:36 PM
Name:	IXPLORER
CallId:	FMDY
Dest:	CHANTIER LA CIOTAT
SOG:	0kn
COG:	0°
HDT:	224°
ROT:	0°/min
Lat:	43°10.322'N
Long:	005°36.817'E
Length:	37m
Width:	8m
Draft:	3.7m
MMSI #:	226266000
Status:	Restricted manoeuvrability
RNG:	5.735NM
BRG:	302°

The main interface features a map with a red vessel icon. On the right side, there are several control panels:

- File Tools >>**
- DR** (Display Range) section with input fields for Lat (043°07.323 N) and Long (005°43.517 E), and dropdown menus for Course (0) and Speed (0).
- Log** section with values for Log (0.00), Trip (0.00), and Hours (0.00).
- Positions** section with a dropdown menu and a "Find Position" button.
- Routes** section with buttons for "Open Route", "Reverse Route", and "Activate Route".
- Route Statistics** section with fields for Start, End, and Dist.
- AIS Info Find** section with a dropdown menu.
- Shading** section with buttons for 1, 2, 3, and 4.
- AUTOMATIC OFF** and **TRACK ON** buttons.
- Current Position:** 43°34.459'N, 008°22.322'E, 77° 119nm.

DEMO

Outcome

Manual Test Time Ave: 15
minutes

Automated Test Time Ave: 2.5
minutes

Real Life Application

-Small & Large
Companies

-Save Time & Money

Extension

- Network based
- Large amount of systems