User Experience In IDNA

TF-AIDN, June/2014

Presented by …

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Outline

- Context
- Methodology
- Results
- Examples

Context (Arabic IDN)

- This assessment is being performed on IDNA from an Arabic user point of view. Therefore, any referencing to IDNA during this presentation, it's for Arabic IDNA.

- The main purpose is to assess end user experience. In other word, we look to IDNA from user point of view.

The Methodology

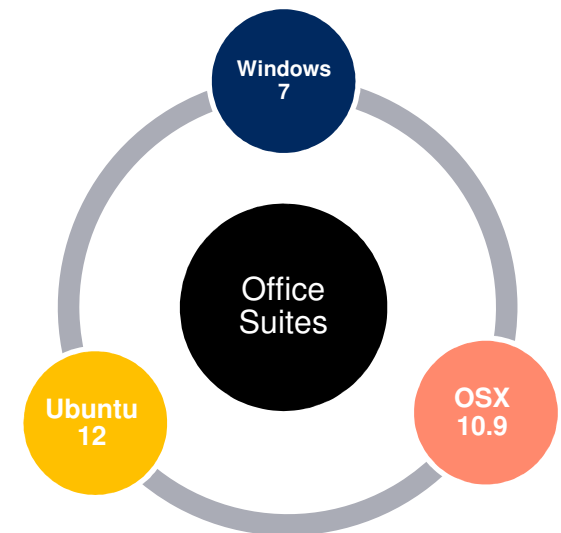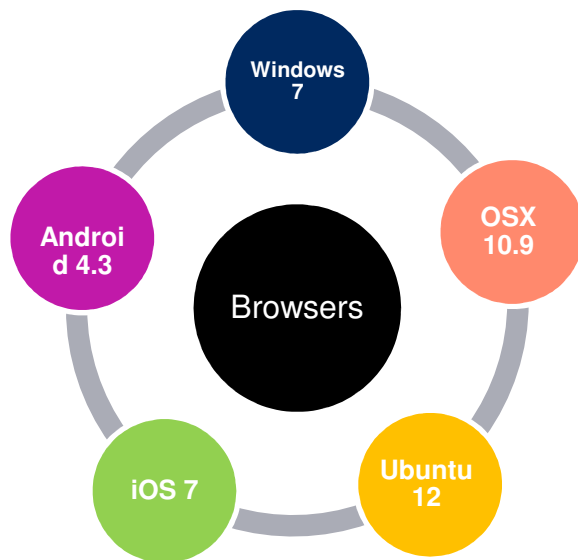|	
Brain Storming	What it can be part of IDNA report.
Literature Review	Look at previous efforts and reports.
Scope Definition	What we can exam in a given period of time.
Test Case Modeling	Build a test case model.
Test Case Creation	Generate test cases based on the model
Tools Creation	Develop a system to manipulates test cases.
Execution	Apply the test cases and collect results.

Methodology: Brain storming
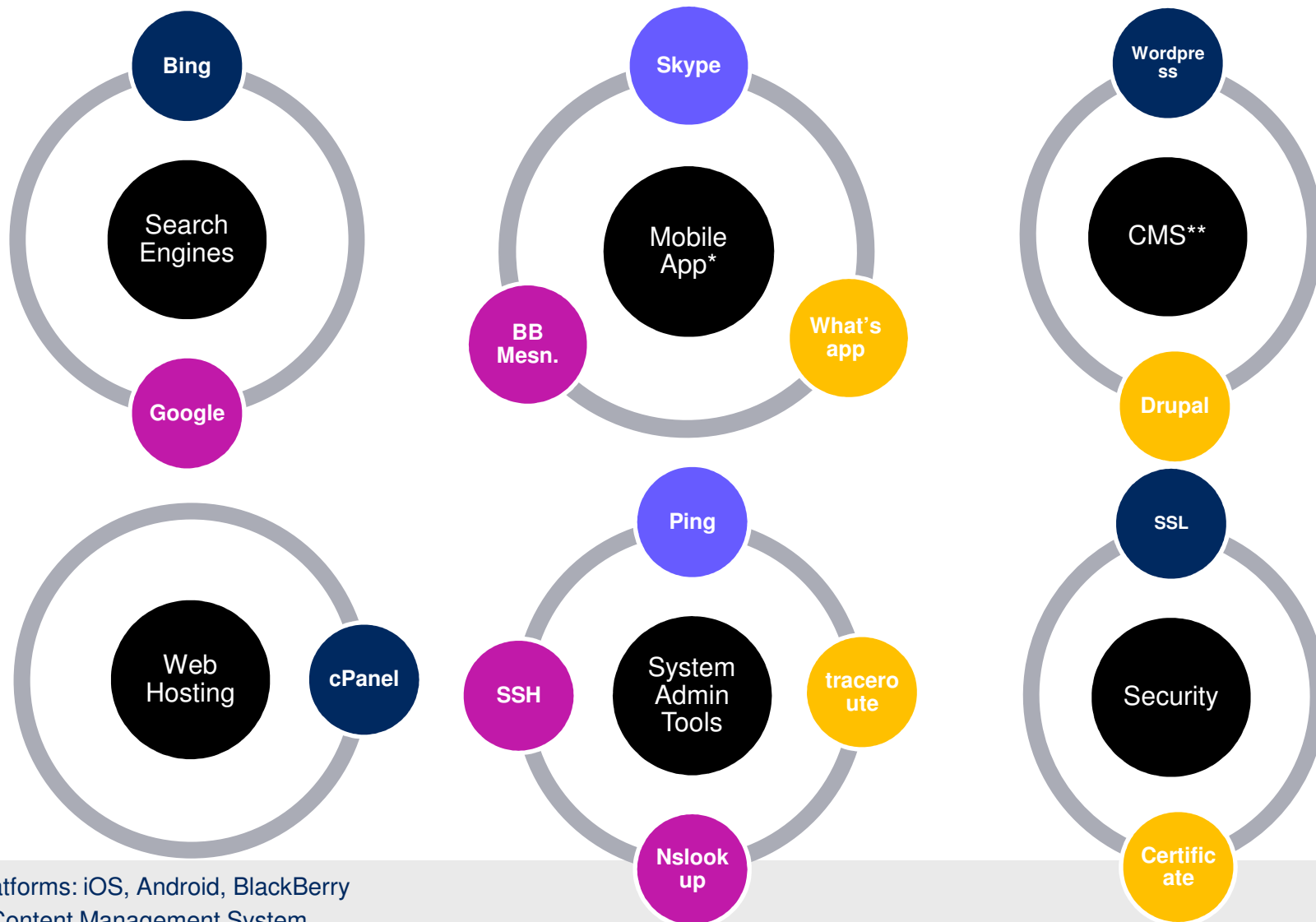
- ## Thinking about what it can be part of IDNA report.
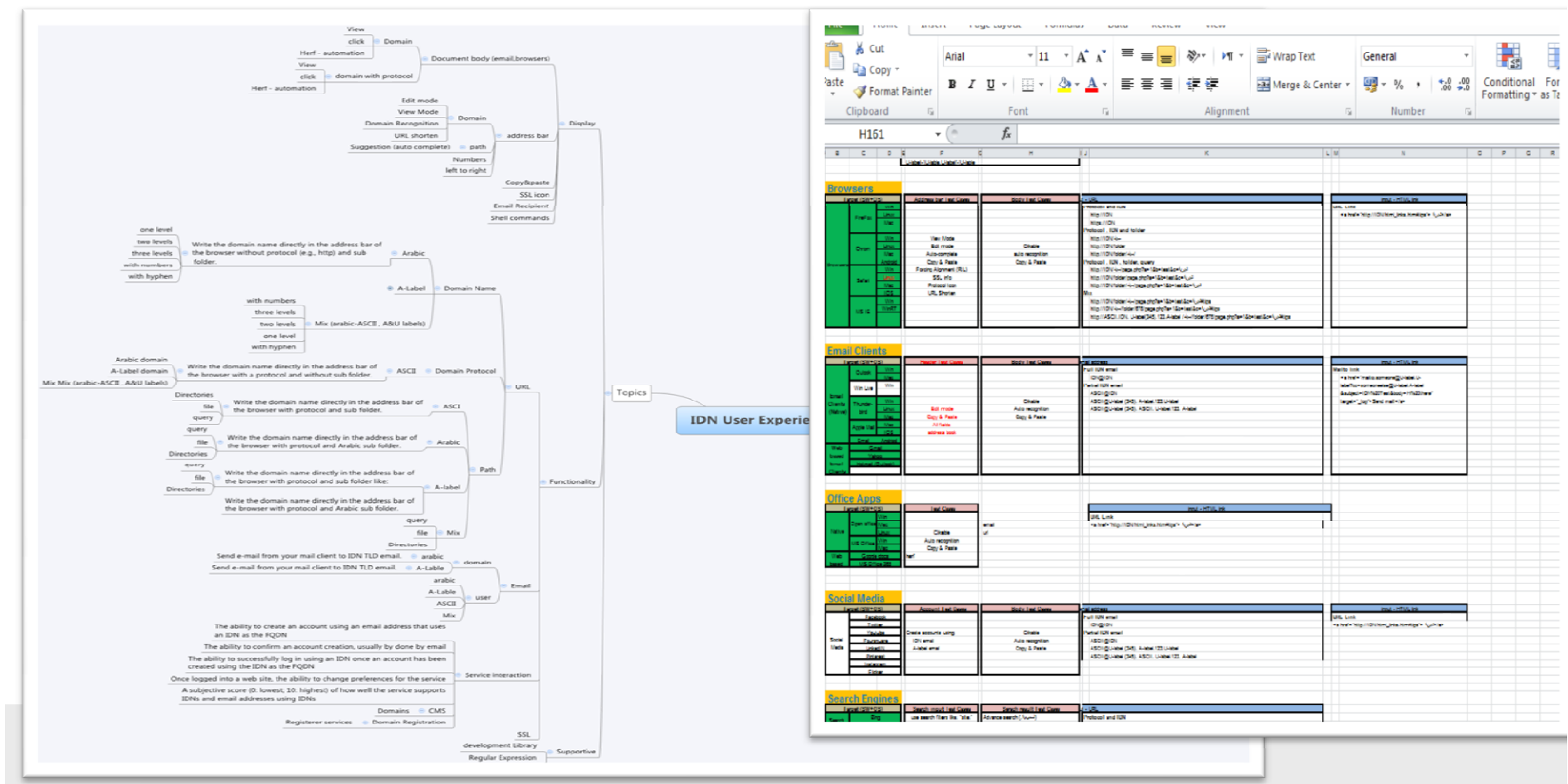
Methodology: Scope definition

- What can be part of IDNA report is HUGE +1000 things!
- We have selected about ~2% to be assessed.
- Our role in selection is: most popular, and used products.

Methodology: Scope definition

Bing

Search Engines

Google

Skype

Mobile App*

BB Mesn.

What's app

Wordpress

CMS**

Drupal

Web Hosting

cPanel

Ping

SSH

System Admin Tools

traceroute

Nslookup

SSL

Security

Certificate

* Cross platforms: iOS, Android, BlackBerry

** CMS is Content Management System

Methodology: Test Case Model

- The test case model used to generate the test cases. It consist of five components.

Behavior	• How a tester should behave.
Input	• The IDN string being tested.
Target	• What is the environment, product and which part of the product.
Checks	• Yes/No questions being asked about what on concern.
Results	• Acceptable, Not acceptable or Not applicable.

Methodology: Test case generation

- We Generate about ~ 190 test case so far.

Methodology: Control system

- Developed a test case control web application

Methodology: test execution

- **Perform the test cases and collect results.**
  - Answer the check questions.
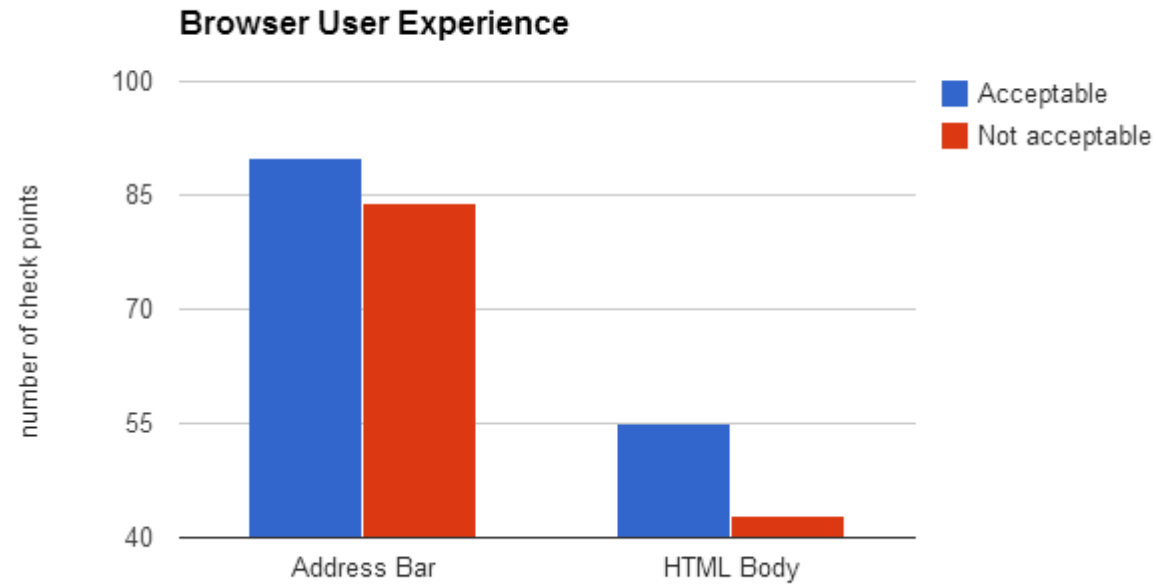 - Upload screenshots of failed checks.

Results

- The assessment project is not finished yet. So far, we accomplished %85 of it.
- The result built on %85 of the total assessment test cases.
- The completed report can be found on our website: http://nic.sa/en/cat/documentlibrary

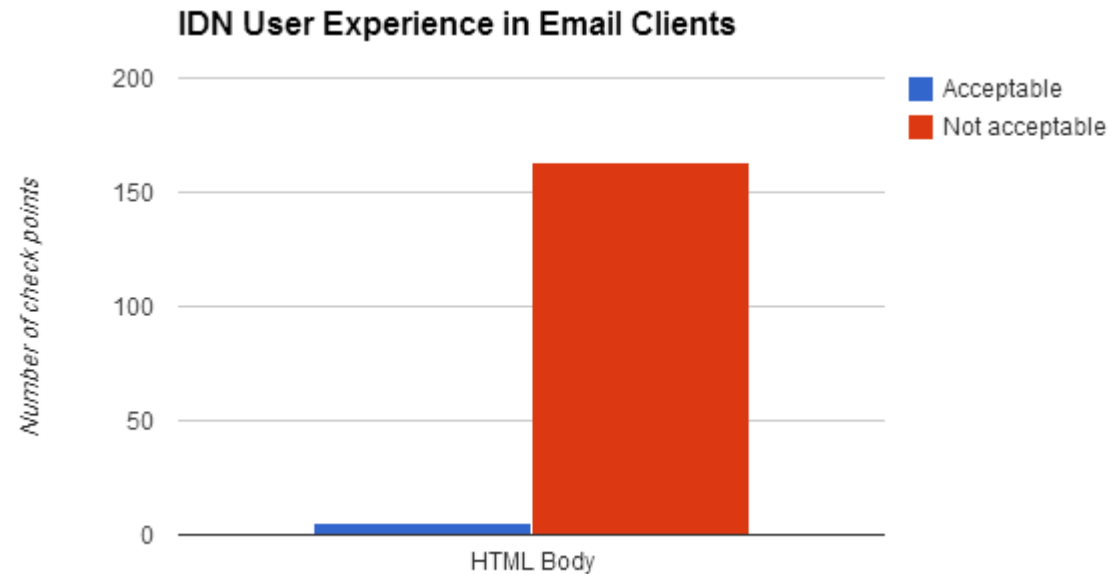# Results: Browsers result summary

- Browsers

Browser User Experience

Results: Email clients result summary

- **Email Clients**
  - This is not IDN Email testing. It is IDN in email messages.
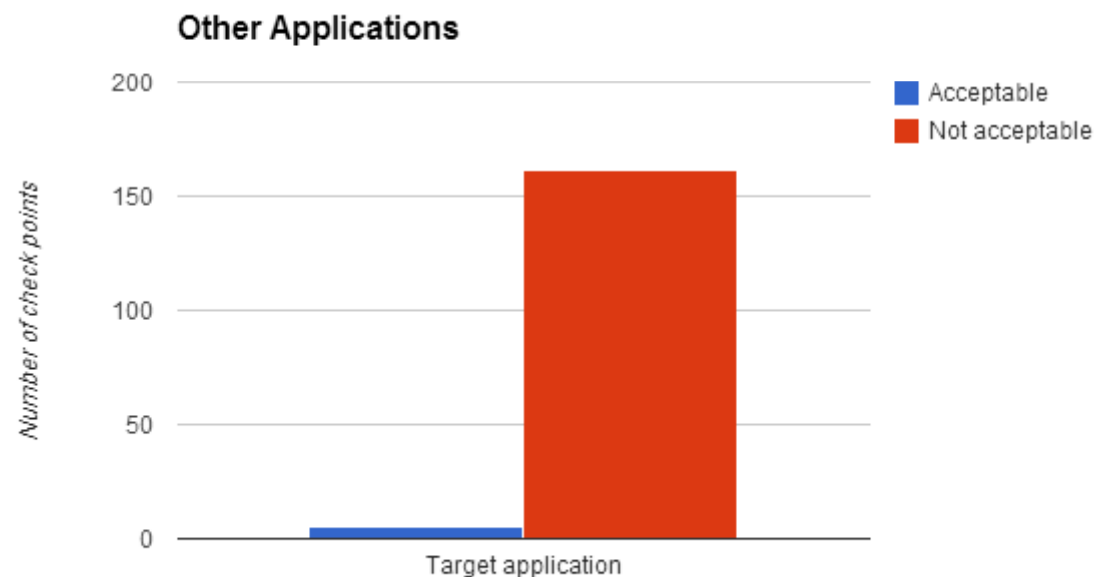
IDN User Experience in Email Clients

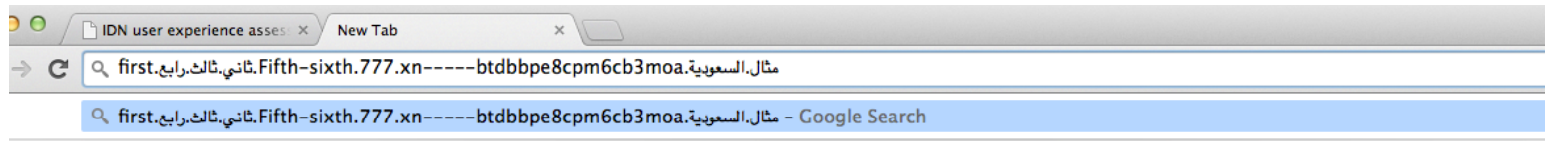# Results: Other applications/tools result summary

- ## Other applications/tools
  - Office suites, system admin tools, Search Engines, Mobile Apps, Content Management System (CMS), Web Hosting management tool, Security.

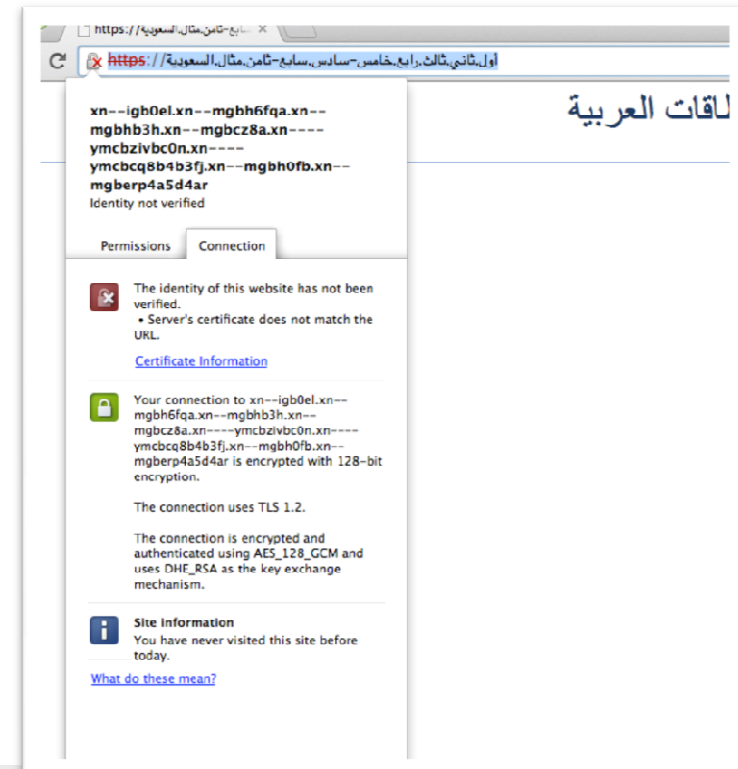**Other Applications**

Examples

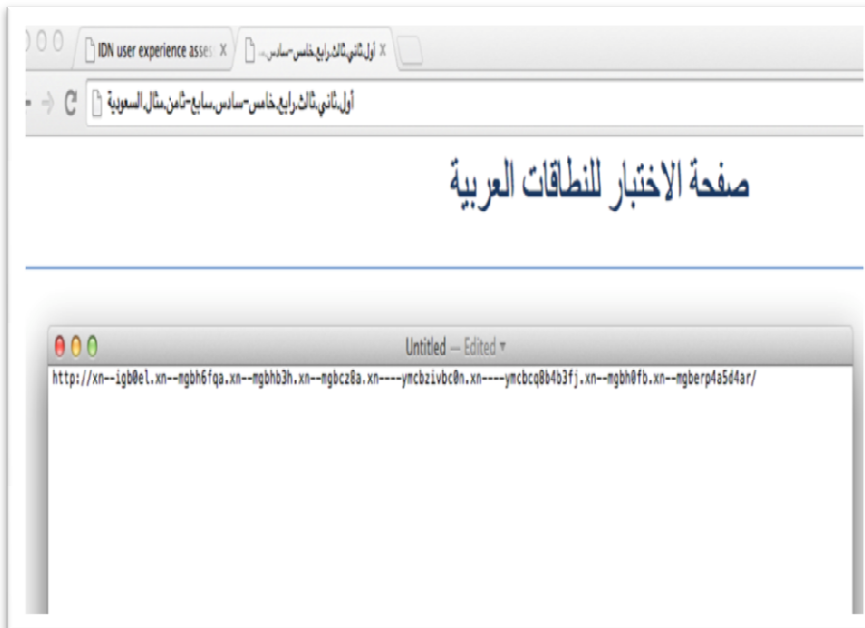- Chrome refuse to deal with IDN:

Examples

- Chrome refuse to deal with IDN:

Examples

- Chrome refuse to deal with IDN:
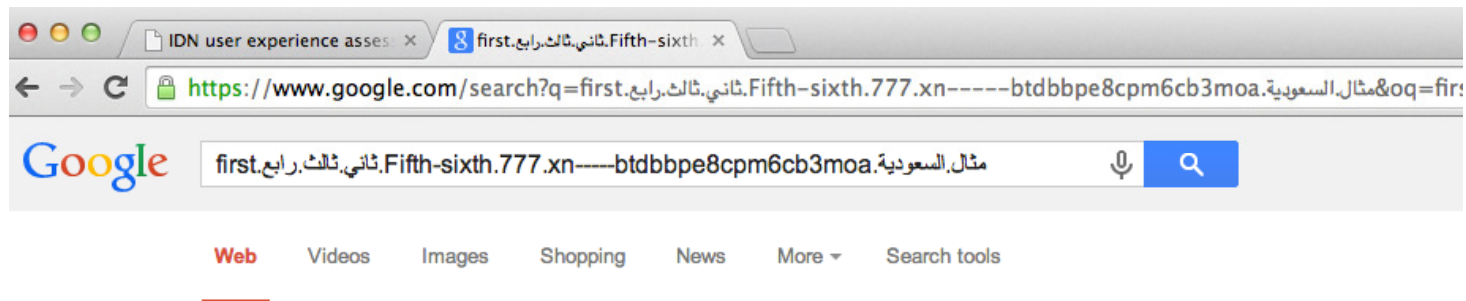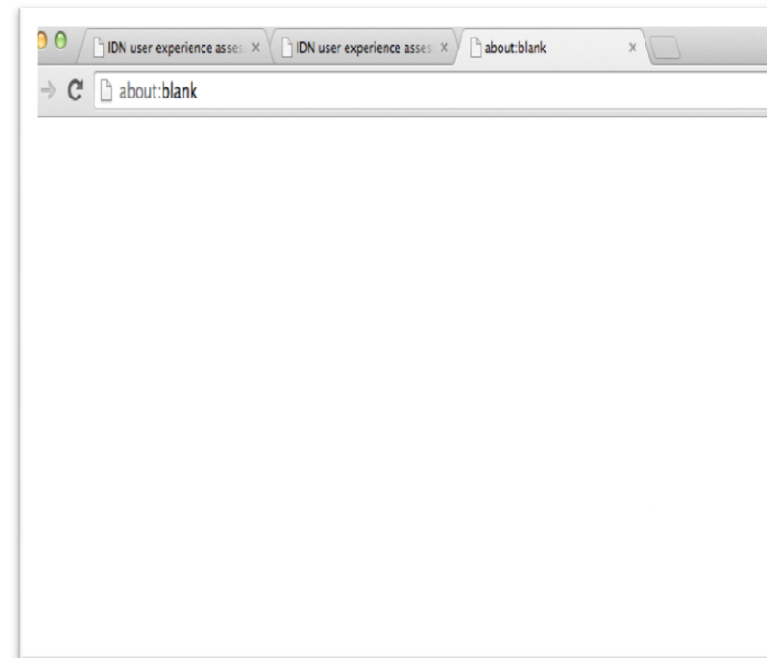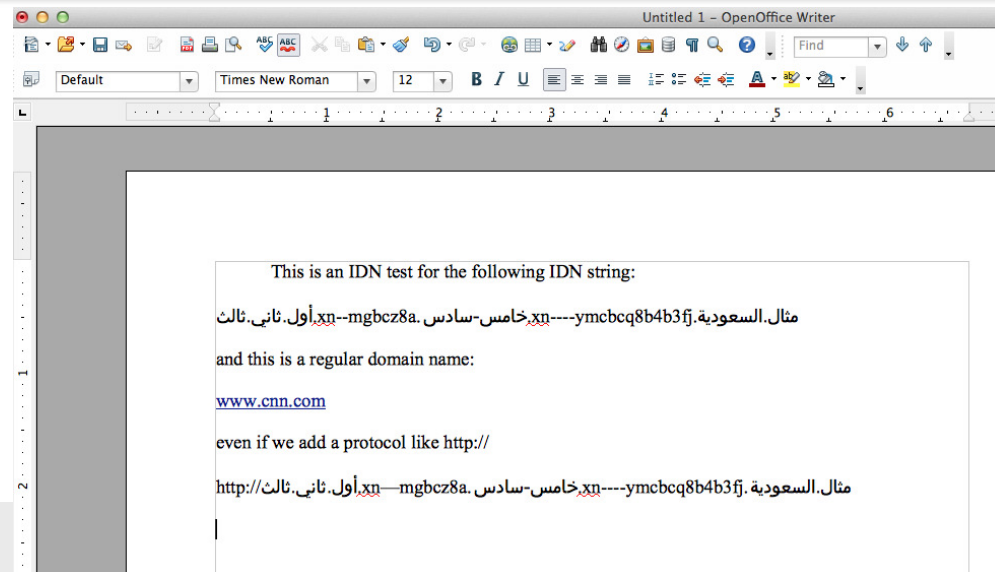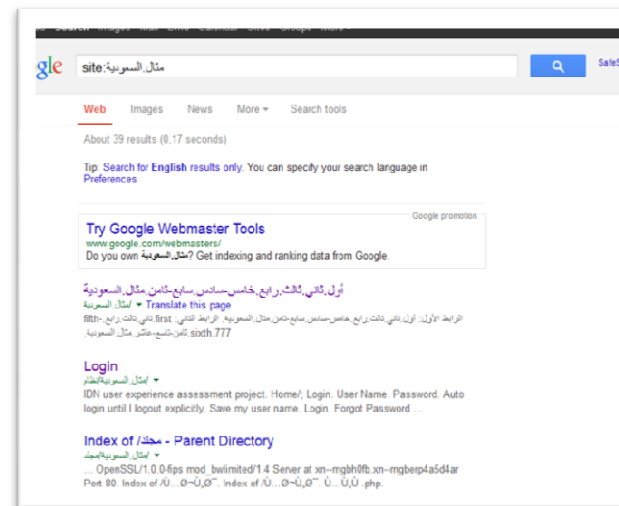
Examples

- **Chrome refuse to deal with IDN:**
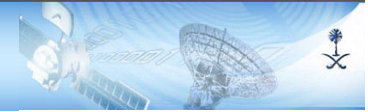
Examples

- ## Microsoft Word

- ## Open Office

Examples

- **Google search**

- **Google advance search**
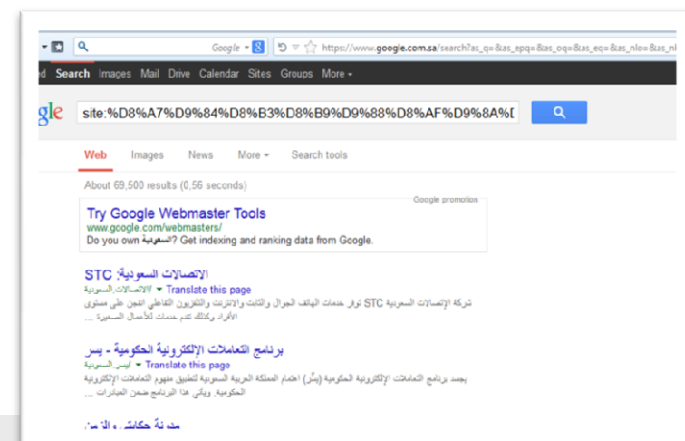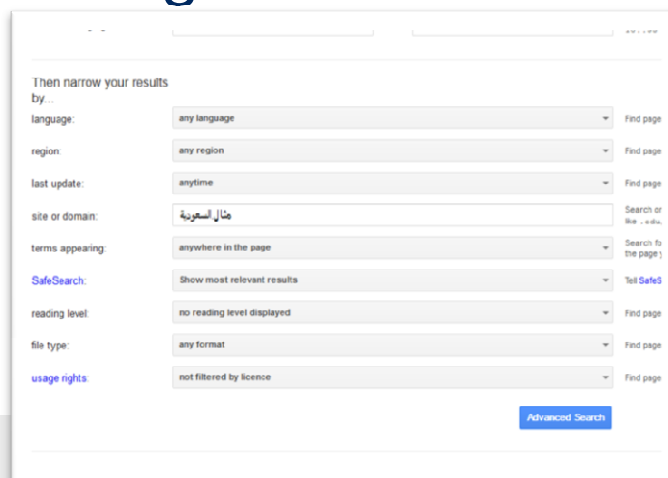
Examples

- System Admin Tools: SSH

Conclusion

- User acceptance for IDNA is less than 1%. (Excluding address bar in some web browsers).
- It's been more than 10 years since the publication of IDNA RFCs, it's less than 1%!
- IDNA ≠ browsers address bars.
- How long do we need for Internationalized Email (IDN Email) to be fully deployed, are we going to wait 10+ years to get a 1% acceptance of IDN Email.
- RFCs are not enough, we need accelerators. As it is happening in other internet converting topics (e.g. IPv6)