SASy Username and Password Management on the Cloud

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1- Introduction
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Introduction
Introduction

How to access to the internet?

- Variety of devices
- Different platforms
- Range of users age
Introduction

Most needed websites

- **E-Mail Services**
  - Hotmail
  - Yahoo
  - Gmail

- **Financial Services**
  - Bank Account
  - Insurances
  - Stock Markets

- **Job Services**
  - Companies
  - University

- **News Agencies**
  - Weather News
  - Economic News

- **Social Networks**
  - Twitter
  - Google+
  - Facebook
  - LinkedIn

- **Interests**
  - Weblogs
  - Restaurants
  - Personal Web Site
  - Entertainment Centers

▶ An account for Authentication
Problem Statement
Username and Password powerfull authentication system

► Variety of Platform
  • OS (Windows, linux)
  • Web server (apache, IIS, nginx)
  • DBMS (DB2, MySql, MS SQL, )
  • Programming Language (asp .net, php, jsp)

► Special Rules
  • Uppercase – Lowercase
  • Length of character

► What is Problem?
  • How to remember and managing usernames and passwords?
Problem Statement
Authentication

How does a user manage various usernames and passwords?

- Piece of Paper!
- Text/Doc File!
- Password Manager Software
- Special Algorithm
Objective
Objective
Propose

Proposing method to:

- Easily access websites account
- Without memorizing
- Minimum changes on web service authentication system
Objective
Advantages of method

- Doesn’t need to reconstruct authentication structure
- Choosing a Username and Password following web portal service rules
- No monopoly and restrictions
- No monopoly for keeping data
- Users have trusted to provider companies
Technical Aspects
Introduce

► Authentication Plugins (gateways)
  • Social Networks
    – Advantage (use in more website)
    – Disadvantage (some times out of access)

► What about computer security companies?
  • Years of trust
  • Protect system files

► Introduce SASy
► “SASy” is the short form of Safe Authentication System
Technical Aspects
Responsibility

- Three well-known companies
- More companies?
- Share Encrypted Data
Technical Aspects
Prototyping

First Step: Signing up in SASy

► Signup
  • Personal information

► Encrypted data divide
► Two part for one server
► Different store algorithm
Technical Aspects
Prototyping

Second Step: Entering website

- Login page of web site. *(for example: test.com)*
- Inserting Username and Password at the appropriate location.
- Click on LOCK Icon.
Technical Aspects
Prototyping

- In new page, Input SASy Username and Password.
- Click Add button.
- In this level, SASy username and password is checked and if the process was successful, username and password of test.com will be check.
- If previous process is passed website sends a packet to SASy to confirm that username and password are matched.
Technical Aspects
Prototyping

Third Step: Login

- Direct Login
- SASy Login

Step 1

Step 2

Click on appropriate account:

admin
user
majid
Conclusion
Conclusion

- Easily access websites account
- Without memorizing
- Minimum changes on web service authentication system
- Safe by dividing data to trusted companies
Thank You

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References
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