RESEARCH ARTICLE

Automated Window 8 Security and Safety System

Geeta

Scholar of Ganga Institute of Technology and Management

Dr. Neelam Sharivastav

Assistant Professor of CSE department in GITAM

ABSTRACT: Automated Windows 8 Security Console is software program which is aimed to help Windows 8 Users to protect their privacy & from malicious attacks. Automated Windows 8 Security Console is a Graphical User Interface Software which guides an average user about the latest security issues involved in windows 8. Software then offers a feature to implement the security by simple approval by user. The approval can be a simple click or an enter button. Automated windows 8 Security Console will establish a security configuration for Microsoft Windows 8. Automated Windows 8 Security Console will help system and application administrators, security specialists, auditors, help desk, and platform deployment person who plan to develop, deploy, assess, or secure solutions that incorporate Microsoft Windows 8.We are Making Windows Security Console which make the user free from Malicious attack and privacy.

INTRODUCTION

Automated Windows 8 Security Console is designed for systems in which security and integrity are the highest priorities, even at the expense of functionality, performance, and interoperability. Therefore, each setting should be considered carefully and can be applied by an average administrator who has a understanding of the potential impact of each setting or action in a particular environment.

Automated Windows 8 Security Console will protect Windows 8 System in an automated manner. The automation can be configured on the basis of System Scan or Manual Intention of a User to protect the system. Automated Windows 8 Security Console will have the following security modules:

Authorization Console: The Authorization Console allows you to set role-based permissions for Authorization Manager-enabled applications.

Certificates Security Console: This allows you to browse the contents of the certificate stores for yourself, a service, or a computer.

Computer Security Console: This allows you to protect Software, Windows & Security Settings. Computer Security Console is an important module of the software. This will ensure the security configurations for Accounts Security, Privileges Security, Firewall Security Configuration, Network Management Configurations, Public key Security Issues, Software Restriction Configuration, Application Control, IP Security & Advanced Audit for the system. The motivation behind Automated Windows 8 Security Console is to provide users a learning platform for security services and practically implementing the security standards to protect the system. The software will help in learning sector for learning information security for windows based operating systems. The software will be required at various organizations which deploy windows 8 operating system in near future. This is a platform for complete learning and to implement security.

BRIEF HISTORY

Windows 8 is an operating system produced by Microsoft for use on personal computers, including home and business desktops, laptops, tablets, and home theater PCs. Development of this operating system started before the release of its predecessor in 2009. Its existence was first announced in January 2011 at Consumer Electronics Show. During its development and test phases, Microsoft released three pre-release versions: Developer Preview (September 13, 2011), Consumer Preview (February 29, 2012), and Release Preview (May 31, 2012). On August 1, 2012, Windows 8 graduated from the development stage and was released to manufacturing. Windows 8 is slated for general availability on October 26, 2012.

EARLIER WORK

Graphical user interface software known as Automated Windows 8 Security Console. This console will provide a platform to implement the security for windows 8 operating systems. Enabling the security features depending on the set of rules maintained by local database server. The analysis of the state change can then be done by Users or Technical Analysts or Security Auditors. Windows 8 provides a lot of security features which are built into windows 8. Windows 8 provide a command line utility as well to manage the policies. The problem lies where the implementation the security is required. Windows operating systems are the most used operating systems due to easy to use interface.

Problem Formulation

Windows 8 provides a lot of security features which are built into windows 8. Windows 8 provide a command line utility as well to manage the policies. The problem lies where the implementation the security is required. Windows operating systems are the most used operating systems due to easy to use interface.

In day to day scenario, Windows operating systems have manage to make their positions in the following places. Schools, Colleges, Educational Institute&, Research Centers. Organizations, Companies, Industries, Small scale, Large Scale firms.
Shopping Places, Shops, Distribution Centers, Purchase Centers Web Servers to store important information, which can be accessed over internet. Smartphone, Mobile Phones & tablet pc's. Windows have managed their place at every place. The security is of much concern to protect user data. Systems are developed a bit insecure due to provide ease of access to users. Security mechanisms are provided in the system but are disabled by default to provide easy operations. Technical Skills are required by a user to implement or enable disable the security feature.
To avoid the lack of technical capabilities situation, we require automated windows 8 security console, which suggests a user about the risks of the availability of feature in user understandable language, so that he can analyze the appropriate risks involved and can allow permissions to protect the system. The software console will be on a monitor mode which scans the system to identify what features are enabled and disabled. The security console will seek for permission from the user and keeps the system secure.

PROBLEM FORMULATION AND SOLUTION

So the security is much concern to avoid the lack of technical capability situation To make a security console name "Automated windows security console" is a user interface security console which will be very helpful for those user which are not computer friendly it means who do not know the operating system basic security features and they are not know about how these security feature applied. So for those users this security console has to be made this security console provides user interface which is used to apply security features of windows 8 with simple click on button which is available in automated windows 8 security console interface. So for this purpose this security console has to be made Automated Windows 8 Security Console. The motivation behind Automated Windows 8 security Console is to provide user a learning platform for security services and practically implemented the security standard to protect the system. The software will help in learning sector for learning information security for windows based operating system. The software will be required at various organizations which deploy Windows 8 operating system in near future. We are making GUI for this console given methodology.

This is most recent topic which I have choosen.This topic is also been research by many. As windows 8 is very new to us.

Our console is made up following processes.

1. Information Gathering Phase
2. Feasibility Study:
3. Coding The Software:
4. Testing Phase.
5. Maintenance

Objectives

Create a graphical user interface software knows as Automated Windows 8 Security Console. This console will provide a platform to implement the security for windows 8 operating systems. System scanner identifies the current posture of Microsoft Windows 8 operating system. Generation of state report after the current scan. Enabling the security features depending on the set of rules maintained by local database server. A report will be generated after the changes have been made to the system. The analysis of the state change can then be done by Users or Technical Analysts or Security Auditors.

Methodology

I have organized the methodology to be followed to develop the successful application, step by step.

Information Gathering Phase:
Feasibility Study:
Coding the Software:
Testing Phase.
Maintenance

Platform Support

The Software is developed to run only for windows 8 Operating Systems.

Literature Survey

Windows 8 Product guide by Microsoft.

Here we learnt about the basic feature of windows 8.

Windows 7
Product guide by Microsoft

Here we are just comparing the previous operation system and changed feature.

Windows 7 Enterprise features And Benefits
Kalyan Kumar,Mangaiah

This gives us the global feature that gives the good feature for windows 7

Managing Desktop Security
SANS Institute InfoSec Reading Room

Desktop is the entry point to the organization's information resources. If the security of the desktop is weak, potential intruders can easily by-pass the first obstacle. This document describes the defense mechanism for security of desktops (including notebooks or laptops) in a network computing environment from the approach of security requirements among users, process of implementing and enforcing security policies and technology within an organization.

Windows 8 Forensic Guide
        Amanda C. F. Thomson, M.F.S. Candidate

Windows 8 is an operating system " reimagined and reinvented from a solid core of Windows 7 speed and reliability"[i]. While I can neither con-firm nor deny this statement, there are certainly many forensically interesting spots we are familiar with from Windows 7 and Vista, which is good for us because it means this operating system is not completely reinvented.

Encryption Using Windows Bit Locker Drive Encryption

 2008 Microsoft Corporation

The Full Volume Encryption using Windows BitLocker Drive Encryption offering capitalizes on the Microsoft® Solution Framework (MSF) to envision, plan, develop, stabilize (test), and deploy BitLocker in your environment.

Data Protection | Security Tools

2014 Dell Inc.

Dell Data Protection | Security Tools (DDP|ST) provides security and identity protection to Dell computer administrators and end users. DDP|ST is pre-installed on all Dell Latitude, Optiplex, and Precision computers and on select Dell XPS notebooks

DDP|ST provides authentication support for Windows Passwords, Fingerprints, and Contactless Cards, as well as Self Enrollment and One-Step Logon (Single Sign-On [SSO]).
The Administrator Console is available to users with Administrator privileges and is used to configure the software for all users of the computer.
The Administrator Console is used to set up authentication policies, manage users, and configure advanced settings as well as settings specific to supported credentials for Windows logon. The Administrator Console also provides the ability to set login and recovery policies for self-encrypting drives.
The Security Console is the centralized user interface for all end users of the computer.
The Security Console is used to set up and manage user's credentials, view the enrollment status of their credentials, backup and restore program data as well as Password Manager logons and credentials for Windows. The Security Console provides a wizard-driven user interface to enable users to configure their credentials and self-recovery questions.

IPv6 Technology Overview
Byju Pularikkal
Customer Solutions Architect, Cisco Systems Inc.

Implementation of IP6 to windows 8 and how it can work for windows console.

Connection Manager

Service Template Version 1.01
For UPnP™ Version 1.0
Status: Standardized DCP

The study of above provides Service Modeling Definitions for windows and its console like State Variables, SourceProtocolInfo, SinkProtocolInfo, CurrentConnectionIDs Evening and Moderation and Actions .

HIMSS

Federal Government Agency IPv6 Transition Plan Found in the Public Domain

IPv6 was designed to build on the existing features of IPv4 and remedy many of its limitations by doing extending the address space for end-to-end global addressability and Internet scalability. Enough to offer a globally unique IP address to any device in the foreseeable future.

Proposed Place of Work

The software can be developed and tested in a Laboratory Environment. The laboratory environment will help test the application for a real time request and response mechanisms to update security. The software will be tested and run in stand-alone manner on a dedicated windows 8 system.

References

[1]Windows8, from Wikipedia, February 29, 2012   http://en.wikipedia.org/wiki/Windows_8

[2] Secure Windows 8, TechNet Microsoft, February 29, 2012
http://technet.microsoft.com/en-us/library/hh832030.aspx

[3]Windows XP security console; http://www.dougknox.com/xp/utils/xp_securityconsole.htm

[4]Active X controls; http (active x control)