Automated Windows 8 Security Console

Pankaj Kumar Srivastava, Ritika Chugh Malik

Abstract: Automated Windows 8 Security Console is software program which is aimed to help windows 8 user to protect their privacy and secure the system through the security policies. This Automated Windows 8 Security Console is graphical user interface software which guides an average user about the security issues and this software offers a feature to implement the security console by simple approval by windows 8 user. The approval for security console can be a simple click or enter a button. As the name suggests Automated Windows 8 Security Console will protect the system in automated way

Key words: Windows 8, operating system, security, console, policy, secure, unsecure

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1 INTRODUCTION

Windows 8 is an operating system it is product of Microsoft, produced by Microsoft for use on home and business PCs. Purpose of this console is to create graphical user interface software known as Automated Windows 8 Security Console used to protect the user document and the system. This console will provide a platform to implement the security for Windows 8 operating system. Automated Windows 8 Security Console will provide guidance to user to realize the importance of the security. Account lockout, user account control, software restriction security, drive lock, etc these are help to learn the security feature. Automated Windows 8 Security Console designed for those systems in which security and integrity are the highest priorities. This security console establish security configuration for windows 8 system. Windows have managed their place at every place that's why security is of much concern to protect user data. System 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 operation 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 risk of availability of feature in user understandable language, so that he can analyze the appropriate risk involved and can allow permission to protect the system. The software console will be on a monitor mode which scans the system to identify what feature are enabled and disabled. The security console will seek for permission from the user and keeps the system secure [**1**]

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2 PROBLEM STATEMENTS AND MOTIVATION

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. 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. 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. School, Colleges, Research Centers, Organization, Companies, Shopping places, Smartphone, Mobile phones and tablet pc's.Windows have managed their place at everywhere, 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. This is a platform for complete learning and to implement security [**2**].

2.1 Automated Windows 8 Security Console Unsecured policy

Automated windows 8 security console enabling the security configuration for Microsoft Windows 8. This configuration has to be done on the basis of un-configured policy of the windows 8. Windows 8 operating system has many of un-configured policy like Account Policy, Audit Policy, Windows Firewall Policy, User Account Control Policy, etc these policies are already present in windows 8 but those are un-configured mode. These policies are enable using registry but it is not

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easy task for those user who has lack technical knowledge, so for those user this console has to be made they just click on start security console or just enter a button and the policies are enable and this will secure your system and user data. Un-configure policies are collected as unsecure policy in automated windows 8 security Console and these policies are given below [**3**]

2.2 Automated Windows 8 Security Console Secure Policy

There are many policies in windows 8 operating system which is require to configure through these secure policy we configure all the require policies. We create windows INF file for both secure and unsecure policy and when we run the Automated Windows 8 Security Console as administrator t after we just click on the start security console and import the Automated Windows 8 Security Console secured policy application file then after restart the system these policies are run on your system and your system has protected by Automated Windows Security Console [**4**] These policies are unsecure policy or windows un-configure policy these policies are disable, for enabling these policies we editing all the unsecure policy and collecting all edited policy at one place known as secure policy in Automated Windows 8 Security Console. Editing has to be done on the basis of change the value of policy or assigning the new value or enabling the disable policy. Secure policy is given below

If you want to UN-configure the policy then you again run the software as administrator and import the Automated Windows 8 Security Console unsecure policy application file after save and restart your system is release from the software. There are many security policies are available, security policies include Account policy, Audit policy, firewall policy and also manage local security policy through all these policy it is possible to manage Group Management policy it includes restricted group setting, User Right policy it includes user right assignment, REGKEYS it includes registry permission, FILESTORE policy it includes file system permission, SERVICES it includes system service settings and also many of other policy are managed [**5**] [**6**]. Additional feature also added to this Automated Windows 8 Security console like firewall security option we just click on interface button of security console and firewall is enable or disable, like this feature also added drive lock, unlock, and secure image, text, media files just behind the 1KB data. In the project automated windows 8 security console there are some policies configured like.

Interactive logon policy
Software restriction policy
Account lockout policy
Password policy
Firewall enables and disables policy
Drive lock policy
Hide image, text and media behind the 1KB data [**7**]

3 HOW TO CONFIGURE THE POLICY

Example for the password security (un-secure and secure policy).
Un-secure policy which are un-configure
[Console   Root\Local   computer   policy\Computer configuration\Windows   setting\Security   setting\Password policy]

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Minimum password age = 0
Maximum password age =-1
Minimum password length =0
Password complexity =0

Secure policy which are configure through Automated Windows 8 Security console
Minimum password age = 3
Maximum password age =10
Minimum password length =14
Password complexity =1

Another example for this software
Default value of Account logout policy is
Account lockout duration = 0 minute
Account lockout threshold = 0 invalid logon attempts
Reset account lockout counter after = 0 minute

Edit values for the purpose of security in the software is
Account lockout duration = 1minute
Account lockout threshold = 3 invalid logon attempts
Reset account lockout counter after =1 minute

These edit values makes your system secure. If the hacker try to access your system so account lockout policy restrict the hacker and if he try to hack or change the password through the command prompt he can type net user username and new password but your system can not accept this password through the software so your system is fully protected in automated way. Through the similar way all the policies has to be edit in the software and when all the values of a single policy are changed and save through the software then this change will secure the system. Similar way if we want to change all the policies in the software, it could be done by this software [8]. [9] [10] There are also some policies which are not require the editing in the values of the policy because they have not values, they have only require enable or disable the values those policies also enable or disable through the this software. Steps required for run the policy (example for interactive logon policy) Run as administrator windows 8 security console application. Click and open the start security console button.
Select and open the security setting
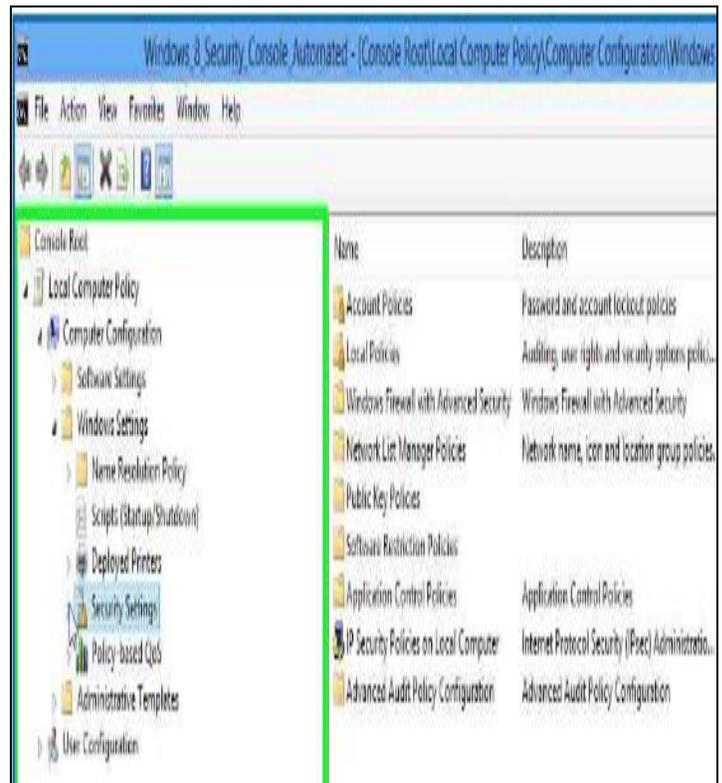Open the local policy

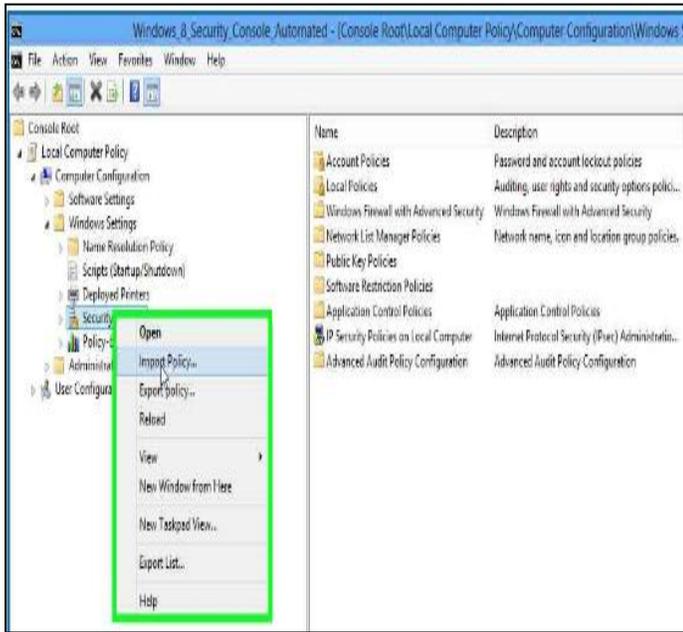Select the interacting logon policy for message text

Double click on this and write the message do you want

Click applies, ok and save the policy. [Console Root\Local computer policy\Computer configuration\Windows setting\Security setting\Security option] Similar steps required to edit all the policies like Software restriction policy, Account lockout policy, Password policy etc. And also all additional policies like firewall enable or disable, drive lock or unlock, and secure image, text, media behind the 1KB data all these make security console automated [10].
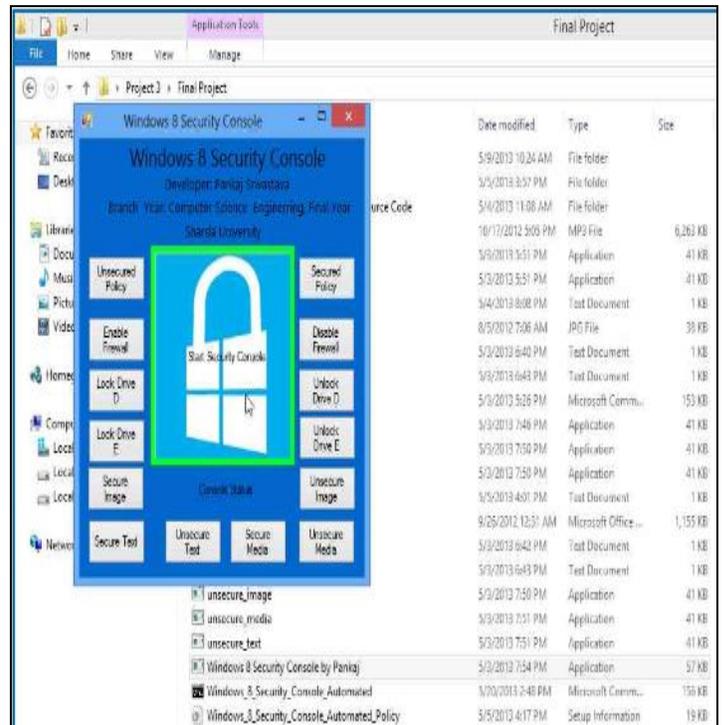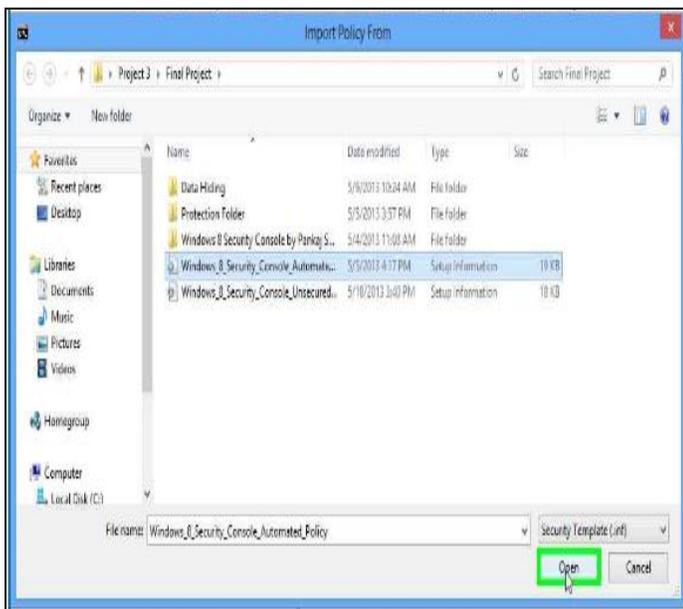

START THE SECURITY CONSOLE SOFTWARE

Windows application programmer interface support for coding.

4.1 Performance

Performance of the CPU at the time of run the project Automated windows 8 Security Console. Performance is given in terms of % format. This software utilized 2% of the CPU at the time of run this is given in the figure

4.2 Memory uses

This software only uses 3.6 MB memory of the system it shown in the figure. It only uses 3.6 MB of 23% of memory it is better than others in the figure

5 CONCLUSION

This software, Automated Windows 8 Security Console is working successfully as proposed. It was successfully installed and running on windows 8 operating system. This console provides privacy and security to the windows 8 operating system without any expense of feature and performance of the system. This security console is very useful, interactive and user friendly for those users who do not have enough technical knowledge about the windows 8 operating system. Users simply have to go to security console interface and enable the policy by clicking the button This is very useful in

IMPORT POLICY

SAVE POLICY EDITING

After saving the policy we just restart or logoff the computer and the policy is run on your computer system.

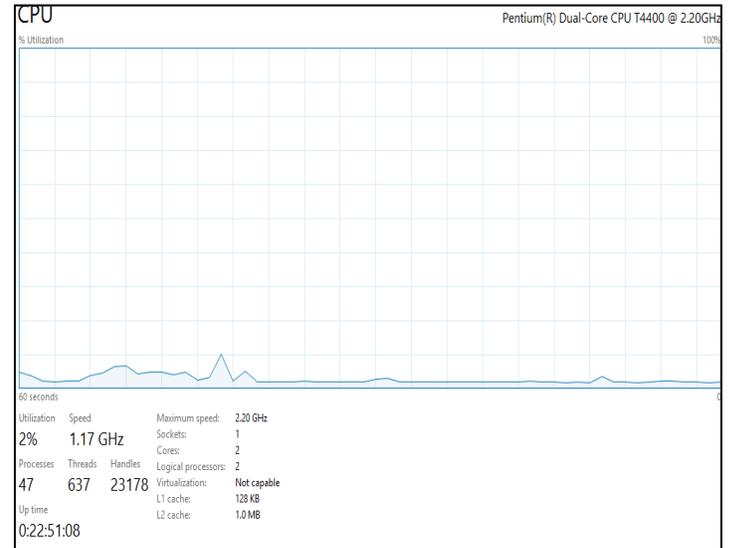## 4 HARDWARE AND SOFTWARE REQUIREMENT

Hardware requirement for this Automated Windows 8 Security Console is windows 8 installed computer system with all supported hardware device. Software requirement for this Automated Windows 8 Security Console is

- Microsoft visual studio 2010.
- Microsoft .Net Framework.
- Any database server.

school and colleges lab and shopping places, distinct work station, offices and also in home PCs. This software applicable in all places.

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