IJARCCE

ISSN (Online) 2278-1021
ISSN (Print) 2319 5940

International Journal of Advanced Research in Computer and Communication Engineering
ISO 3297:2007 Certified
Vol. 5, Issue 11, November 2016

A Survey on Military Security System

Amol Sanap[1], Prasad Khandelwal[1], Shubham Dhumal[1], Prithviraj Shinde[1], Prof. R.N. Phursule[2]

Bachelor of Engineering, Computer Dept, JSPM's Imperial College of Engineering & Research Wagholi, Pune, India[1]

Professor, Computer Department, JSPM's Imperial College of Engineering & Research, Wagholi, Pune, India[2]

Abstract: Studies have found requirement of an application for military based system for effective and secured access to multiple secret documents with major requirement of being completely secured with the emergence of IT. There is a huge gap in the systems which require complete security and encryption for better and effective document exchange. The resultant draws a major attention to understanding of the armed services requirements and making tools readily available for the defence of these important systems. The product creates a better and effective information management for armed forces across the world. Creating such an application will be a boon for the armed forces and will create value for them in a better manner.

Keywords: Information Security, Military System, Encryption, Multilevel based security.

I. INTRODUCTION

Information Security is the highest priority for any military system. Systems across the world have multiple protocols for limited access. These security systems are sophisticated so that the information isn't leaked to any person. We surveyed multiple security systems in use by US Air force and US Navy. These systems are military grade and have multiple encryptions to stop any hacking or unknown access. Companies such as Air Target, Dell manufacture systems which are completely usable in extreme conditions these tactical equipments are recently used for quicker usage and accessibility these companies help multiple armies to analyse enemy positions the amount of people in particular environment and quick transmission of classified data. Companies such as Centra Security Services have multiple products specific for military needs and has complete and efficient services which give you complete guidance on their usage. In this Scenarios Military needs to be completely aware of its sophistication of the systems which are being used. The system to be developed for this project is better than any other systems the system uses multiple encryption algorithm to protect the classified information.

II. REVIEW OF RELATED LITERATURE

A. Information storage for military

Military and Industry Professions look for effective ways to store the data. Data storage is emerging as an important issue in the US military and the militaries around the world as the services continue to move towards a network force US department of Defence leaders are becoming to pay close attention to how and where to store the data and images that sophisticated technologies are gathering in enormous quantities. After all it not only has to be kept somewhere but also must be readily accessible to be valuable.

Military and Aerospace applications often involve intricate of sensors which gather a wealth of data more information is being gathered than ever before on digital battle field. Inline a wholly owned subsidiary of IceWeb provides data storage to one of the DODs combatant commands the companies True enterprise 444 is being deployed by the DOD to built a 48 Tera Byte repository for Geo Spatial imaginary. The officials require a scalable solution to accommodate expansive growth of geographic information systems data to more than 200 Tera Bytes. Inline designed a storage system capable of scaling 2 Peta bytes.

B. Conceptual Framework

The basic framework for this project is basic requirement of high level systems for the military there is also a requirement in multiple applications for high speed data, radio astronomy, high resolution video imaging and radar surveillance as military systems have requirements which are necessary for the preservation of national security. OEMs such as Western digital integrates a suite of patented security technologies into its SSDs to save guard data and protect software IP from breaches theft or malicious overwrites. These security features are seen as the most important ones in the military establishment there are systems such as PJFS-178B these system integrates a concurrent power fail safe access to the underline file system it enables a security or safety critical application to access the system whereas the PJFS-178B server manages access to underlying storage devices.

There is no question that the military life comes with security and secret information which needs to be secured using recent and new algorithms which can protect the information military systems have the capacity and the capability to store information in depth and create constant vigilance the products for information based system are new and should be processed easily and in better manner. We see multiple companies coming with tactical equipments multi variants of armoury and steel based plates for protection of this systems.

IJARCCE
ISSN (Online) 2278-1021
ISSN (Print) 2319 5940
International Journal of Advanced Research in Computer and Communication Engineering
ISO 3297:2007 Certified
Vol. 5, Issue 11, November 2016

III.RESEARCH METHODOLOGY

A. Interaction with a military contractor

According to the officials one of the key elements in their parent process is to determine the benefits that stored data can deliver while companies have already discovered that the insights that stored data provide increase their bottom line, the military has yet to ascertain an explain exactly how stored data can serve forces this assessment is the first step towards taking data storage into lime light. John J Garstka who is the CTO of joint staff directorate for command, control, communications and computer systems says that because information is the life blood of e commerce, commercial companies have put all the data in one place so that they can exploit it the defence sector is just beginning to make this move the military is examining available data storage products to determine the role they will play in global information grid as well as other network systems he says the linkage of data storage to network centric war fare is indirect we have to network the force first and do it right doing so we must first use a multi data environment and back it up.

B. Industry Review

Data storage is one component of network centric warfare but it is a concept that is still maturing and involves many facets of both technology and doctrine military leaders of most nations recognised that information age, information is a powerful weapon but once all the intelligence has been gathered, once the reports have been filed and the collaboration taken place the bits and bytes must be saved in a secular space therefore data storage must be viewed as an important part in the information assurance arsenal as well. The services which have been platform centric in the past move towards working in an information centric environment, data storage will be a larger concern. The real discriminator in the current available data storage products is the software that allows secured access as well as manages and protects information.

IV.SYSTEM ARCHITECTURE

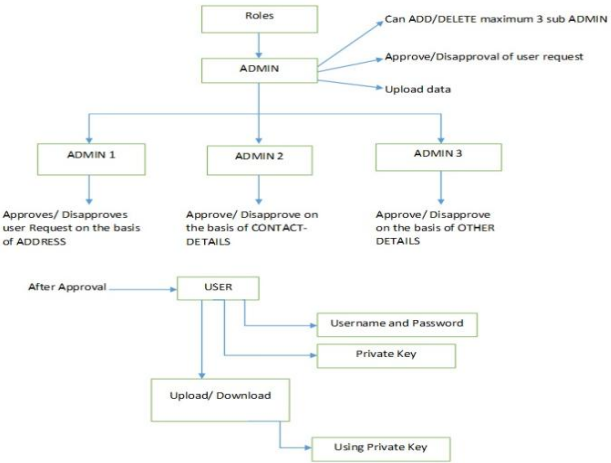

Fig. 1

Figure 1 explains system architecture for the project.

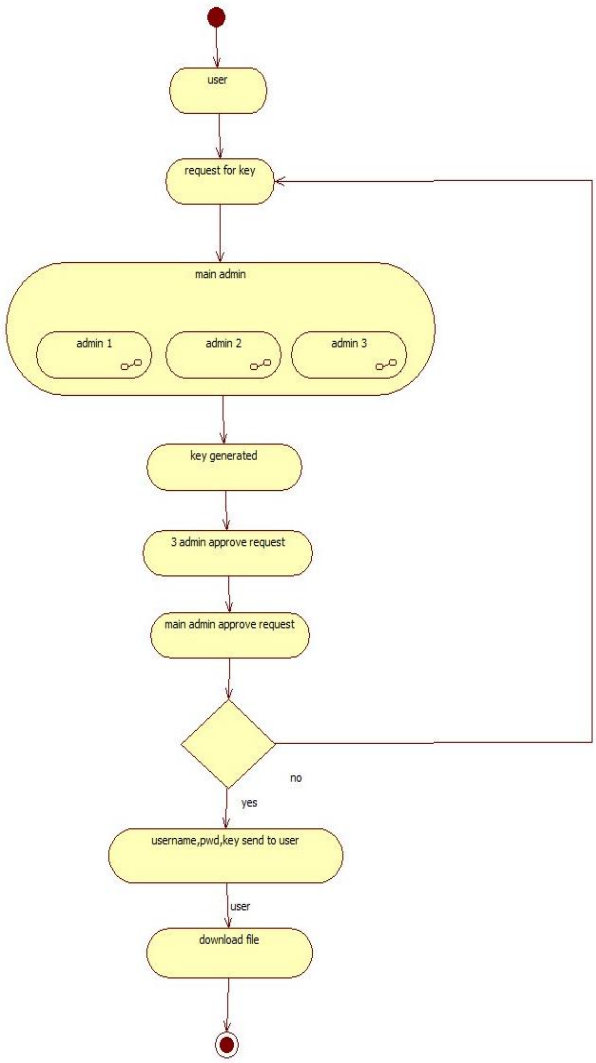

Fig. 2

Figure 2 gives the flow of the Project.

V. DISCUSSION

Military Security systems create secure and classified documents which are of prime importance which need to be managed on a larger scale the logistics and the technology which is used from nuclear weapons to simple missiles need to be kept in a secure location a military company creates a contract based personnel to establish a service for a particular work to be done these private companies give and provide intelligence on multiple fronts which needs to be properly stored.

VI. CONCLUSION

From this application we solve the problem of security using multiple algorithms such as advance encryption standard AES, Secure Hash Algorithm (SHA). To provide effective solution to secure any important classified

IJARCCE

ISSN (Online) 2278-1021
ISSN (Print) 2319 5940

International Journal of Advanced Research in Computer and Communication Engineering
ISO 3297:2007 Certified
Vol. 5, Issue 11, November 2016

documents creating this project will be a good help for the military and will give a better value than any other competition. This project will definitely help bring changes to the existing processes and will bring the required change.

ACKNOWLEDGMENT

We thank our colleagues who have provided insight and expertise that greatly assisted the research we thank our mentor **Akash Bhojraj** for guiding us for this project. We thank our **Prof**. **R.N. Phursule** for inspiring us to do this project and for his comments on the manuscript.

REFERENCES

1. A Multi-Level Secure File Sharing Server and its Application to a Multi-Level Secure Cloud Mark R. Heckman, Member, IEEE, Roger R. Schell, Member, IEEE, and Edwards E. Reed, Member, IEEE.
2. http://www.militarysystems-tech.com/articles
3. https://www.mircom.com/military
4. http://www.security-camera-warehouse.com/military-cctv-systems.php
5. https://www.geico.com/information/military/insurance/vehicle-storage-protection/
6. https://groups.csail.mit.edu/ana/Publications/PubDFs/A%20Comparison%20of%20Commercial%20and%20Military%20Computer%20Security%20Policies.pdf
7. http://www.cse.chalmers.se/edu/year/2013/course/EDA263/oh13/L09%20-%20Security%20Policies--print.pdf
8. https://ieeexplore.ieee.org/document/7357613/