

**MIT School of Engineering**

**Department of Computer Science and Engineering**

**Mini Project Synopsis**

**Group ID:1**

**Project Title: Server Management**

**Group Members:**

| **Enrollment** | **Roll No.** | **Name of student** | **Email Id** | **Contact Number** |
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| **Problem Statement:**  In this pandemic everyone had to work from home and the work of a system administrator get extremely difficult as he might have to manage many servers and also manage there passwords and keys  We can ease this process of server management by making all the servers accessible using one application with One Click Login process. |  |
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| **Abstract:**  The aim of this project is to improve the work from home situation of a system administrator by keeping all the data related to the server he/she is managing in one place.This will reduce their hassle of keeping track of which password and key is for which server. |  |
| **Literature Survey:**   | **Sr No.** | **Referred Paper/Journal** | **Year of Publication** | **Summary of paper referred** | | --- | --- | --- | --- | | **1** | Design and Implementation of Cloud Server Remote Management System | 2016 | This paper helped us to understand how and what data should be taken from a server for monitoring | | **2** | Management Server | 2014 | This journal helped us to understand what all should be present in a server management software | | **3** | Client Server | 2019 | In this survey, we present a detailed report for the client-server based system, highlighting its key concepts, architectural principles, and state-of-the-art implementation as well as research challenges. This paper aims to provide a better conscious of the design challenges of a client-server based system and identify essential research guidelines. | |  |
| | **4** | Django | 2020 | Django provides a wide range of features and functionalities. The administration interface provided by Django is one of the coolest things. It’s truly simple to create and it‟s really one of the key advantages when using the framework. | | --- | --- | --- | --- | | **5** | Security credentials and their distribution | 2019 | The text with give introduction about credentials and its security. And it will present some methods for securing credentials information and existing security credentials system. Finally, it will show the detailed analysis of the network application, it is including the developer and customer point of view, specification and the implementation of its along with the technologies use to create the application |  | **6** | AN EFFECTIVE MECHANISM FOR SECURING AND MANAGING PASSWORD USING AES-256 ENCRYPTION & PBKDF2 | 2021 | The data is encrypted using AES-256 encryption algorithm and PBKDF2 which is the current industry standard, additionally, the username and password are encrypted with a key generated from the user's master password, ensuring data security, and the password manager can be integrated into the browser as an extension, ensuring high compatibility and ease of use for end users. | | --- | --- | --- | --- | |  |
| | **7** | Enabling SSH Protocol Visibility in Flow Monitoring | 2019 | Enabling SSH Protocol Visibility in Flow Monitoring  The network flow monitoring has evolved to collect information beyond the network and transport layers, most importantly the application layer information. This information is used to improve network security and performance by enabling more precise performance analysis and intrusion detection. In this paper, we contribute to this effort by extending flow monitoring with information from the SSH protocol. | | --- | --- | --- | --- | | **8** | Distributed SSH key management | 2018 | Distributed SSH key management with proactive RSA threshold signatures  In this paper we present ESKM - a distributed enterprise SSH key manager. ESKM is a secure and fault-tolerant logically-centralized SSH key manager. ESKM leverages k-out-of-n threshold security to provide a high level of security. SSH private keys are never stored at any single node, not even when they are used for signing. On a technical level, the system uses k-out-of-n threshold RSA signatures, which are enforced with new methods that refresh the shares in order to achieve proactive security and prevent many side-channel attacks. | |  |
| | **9** | Secure shell | 2020 | In this paper we will get idea about Secure Shell i.e Secure Shell gives Associate in open convention. Secure Shell clients/server arrangements provide shell for command, transfer of file for TCP/IP applications. Software purchasers and servers area unit develop local Windows usage that provide a selection of SSH. | | --- | --- | --- | --- | | **10** | HTTPS Interception | 2016 | In this paper, they present a comprehensive study on the prevalence and impact of HTTPS interception. First, they showed that web servers can detect interception by identifying a mismatch between the HTTP User-Agent header and TLS client behavior. Here they characterize the TLS handshakes of major browsers and popular interception products, which they use to build a set of heuristics to detect interception and identify the responsible product. | |  |
| **Proposed System (Block Diagram):** |  |
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| **Conclusion:**  To conclude we are making an application where a system administrator can store their server login details securely and access them easily without the hassle of remembering them.This will improve their way of life a bit. |  |
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| **References:**  **Design and Implementation of Cloud Server Remote Management System**-  <https://ieeexplore.ieee.org/abstract/document/7518445?section=abstract> **Management Server** - <https://www.sciencedirect.com/topics/computer-science/management-server> |  |
| **Annexure:** |  |
| **Annexure I: Form A-Title Approval** |  |
| **Annexure II: Form B-Market and financial feasibility** |  |
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| **Annexure IV: Project Tracker Sheet**  CSE Department, MIT School of Engineering, MIT ADT University, Pune |
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