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(71)Name of Applicant :

**1)Chitkara University**

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

**2)Bluest Mettle Solutions Private Limited**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)MISHRA, Rahul**

Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune -----

**2)SINGH, Dhiraj**

Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune -----

**3)MITTAL, Ruchi**

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

(57) Abstract :

The present invention discloses a cloud security auditing system and method for assessing the security posture of cloud-based systems and services. The system collects cloud asset configuration data and performs an analysis using predefined security policies and procedures. Through techniques such as vulnerability scanning, penetration testing, and compliance monitoring, potential security risks and vulnerabilities are identified. The system leverages machine learning algorithms and automation to enhance risk identification and mitigation. An audit report is generated, presenting a detailed list of identified risks, vulnerabilities, and corresponding recommendations for remediation. The report is periodically updated to reflect changes in the cloud asset configuration and security policies. The system also correlates security risk data from multiple cloud environments, enabling the identification of emerging threats. The audit report is presented to authorized users through a user-friendly interface, facilitating navigation, tracking of risk mitigation efforts, and monitoring of the overall security posture of the cloud environment.

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