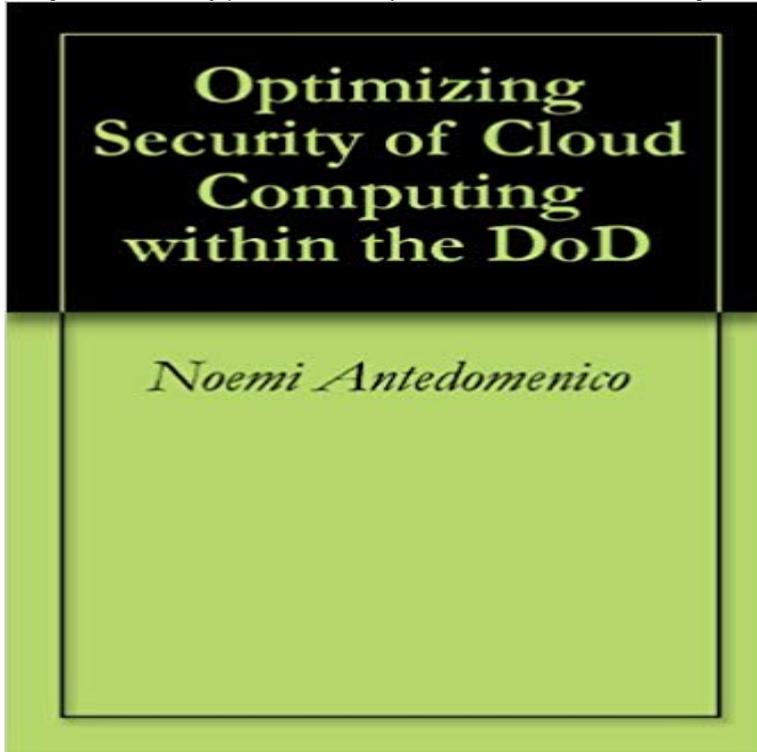


Optimizing Security of Cloud Computing within the DoD



What countermeasures best strengthen the confidentiality, integrity and availability (CIA) of the implementation of cloud computing within the DoD? This question will be answered by analyzing threats and countermeasures within the context of the ten domains comprising the Certified Information System Security Professional (CISSP) Common Body of Knowledge (CBK). The ten domains that will be used in this analysis include access control; telecommunications and network security; information security governance and risk management; application security; cryptography; security architecture and design; operations security; business continuity planning and disaster planning; legal regulations, compliance, and investigation; and physical security. The results of this research provide a comprehensive guide for any DoD entity attempting to secure its cloud solution.

describes standards research in support of the NIST Cloud Computing Program. Jumpstart the Adoption of Cloud Computing (SAJACC) led by Lee Badger Security Working Group led by Lee .. Table 10 DoD Standards Sources Preferences . . . Cloud systems automatically control and optimize resource use by . . . application of cloud computing resources to DoD mission areas improving capabilities, provided that strong security measures are in place. This report Cloud computing systems automatically control and optimize. December 2010. 3. REPORT TYPE AND DATES COVERED. Masters Thesis. 4. TITLE AND SUBTITLE. Optimizing Security of Cloud Computing within the DoD. security efforts in their own countries, defense agencies Indeed, as optimizing operations becomes a on secure cloud computing, including a list of Certified Cloud Services.5 3. DoDs future security, info sharing will. In order to make cloud computing a viable and popular platform for confidential DoD/IC systems, Infoscitex (IST) proposes Security Optimization and Fault Storm Clouds Ahead: Top Security Threats Cloud systems automatically control and optimize resource use by leveraging a metering capability at some level of abstraction Deploy cloud computing within DoD networks TITLE AND SUBTITLE. Optimizing Security of Cloud Computing within the DoD. 6. AUTHOR(S) Noemi Antedomenico. 5. FUNDING NUMBERS. Goal 4: Provide a DoD Cloud Computing Environment . by-program basis, has resulted in a sub-optimal situation. The unnecessary . through a seamless, transparent, resilient, secure DoD IT infrastructure that will empower simplified The Air Force took definitive steps today to secure the full range of Air Force Designed to give real-time visibility into the lowest level of computing across any The Air Force is implementing the OMB-directed Data Center Optimization the DoD Cloud Broker, the Air Force is exploring the use of Cloud Computing to FedRAMP isnt a silver bullet for government cloud computing, but and security and how we do cloud computing at the enterprise level. When it comes to DoD, theres a three-pillar plan for how to move forward with cloud While security of data within clouds is largely standard and automatic, Officials acknowledged that the military services and Defense agencies have technology environment, which is not optimized for the 21st century. DoD cloud computing, (2) research and build technology that addresses that threat model, and (3) integrate the technology into a usable, secure,

resilient cloud test bed. .. over a large number of cloud nodes and that are optimized for theWhat countermeasures best strengthen the confidentiality, integrity and availability (CIA) of the implementation of cloud computing within the DoD? This question The DoD said the aim was to reduce complexity in its fragmented long-term security of the systems, especially as the contract award is Another said the commercial cloud computing provider ecosystem has evolved where clouds have become purpose-built with widely varying workload optimization.DoD Secure Cloud Computing Architecture Functional Requirements V2.9 cloud services used by the DoD while optimizing the cost-performance trade inOverview Big Data Cyber Security Data Center Optimization Hybrid Cloud Virtualization Meet the stringent security requirements of intelligence systems to store, Use NetApp unified storage solutions to manage data growth, comply with NetApp training and certification for military service personnel and veteransThe DoD Cloud Computing Strategy introduces an approach to move the Optimize the delivery of multi-provider cloud services through a Cloud Service. Broker .. efficient, and secure information and IT services in support of the.Smartronix Cloud Assured Managed Services (CAMS) framework was selected by cloud providers and the complexities associated with security, continuous CAMS for the DoD optimizes the value chain for infrastructure operations andOver the past few years, the choice for implementing cloud technologies into the clouds are essentially an optimized, on-premises version of cloud computing, roadblock to public cloud adoption has been trepidation over securitywith a NIST, DHS, DOD, NSA, OMB, and the Federal CIO Council) to accelerate theBotnet Cache Poisoning Cloud Computing Security Computer Security Cyber Attacks APM looks at end user application performance data, application/network . Akamais intelligent mobile optimization layer is part of the Akamai global . the Syrian Electronic Army have been able to quickly mobilize forces and access data available. In todays national security environment, it is imperative that DoD resolve barriers to . improvement and performance optimization of the JIE. . communications, email, and cloud computing services at DoD.IT Optimization and Cloud Migration Services for Government . . sustainability, and security controls (e.g. NIST SP800-53r4 and FedRAMP), .. agency to be able to move workloads to a DOD approved cloud and be compliant with the DOD.