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Risk Assessment Checklist/Program for UNIX Operating System (IBM AIX, Oracle Solaris, HP UX) Infrastructure

By

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Practitioners and researchers in this industry must always rely on strong personal judgment and experience in evaluating and applying information and methods being acquired from this book while also exercising professional due care and caution to ensure their safety and those of others, as well as parties for whom their own professional responsibility.

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Table of Content

About the Author -----	7
Preface by Nwabueze Ohia -----	9

Main Section Risk Assessment Checklist/Program for UNIX Operating System (IBM AIX, Oracle Solaris, HP UX) Infrastructure

About the Author

A Certified Information Systems Auditor (CISA), PECB certified Lead Auditor in ISO 27001 (Information Security Management System), ISO 22301 (Business Continuity Management System), ISO 20000 (IT Service Management System) and Lead Cyber Security Manager (ISO 27032), Nwabueze Ohia is a seasoned Information Assurance and Cyber Security professional/expert with over 12 years working experience in consulting and full time employment. He has worked in the banking sector in Nigeria as IT auditor and information security practitioner with experience spanning information systems audit and assurance, information/cyber security, technical infrastructure security/assurance, system controls analyst, IT risk analyst, data analyst and consultant. He is an expert in the development of audit work programs, checklists and risk assessment template that conform to Institute of Internal Auditors (IIA) standard, which practitioners has found useful in the discharge of their assurance functions. With his rich knowledge of the financial services sector and underlining security/controls required of systems and IT infrastructure in the sector, his eBooks, educational and professional materials, which are result oriented and tailored towards addressing information security issues have assisted practitioners within Nigeria, Sub-Sahara Africa and beyond in addressing risk in the ever changing and dynamic control environment. Beyond the financial services sector, practitioners in other industries such as insurance, telecommunication, web hosting, Internet service providers, SaaS, cloud service provider, distribution & supply chain management, shipping, oil & gas, etc., have leveraged on materials produced by Nwabueze to excel in their endeavors.

Nwabueze Ohia has written several educational and professional materials in the field of information assurance, information/cyber security and technical infrastructures, which are published on his website (<http://oxleyconsults.com.ng>). In addition, he has four books to his credit, which he self-published on Amazon Kindle Book store as well as other ebook platforms across the globe. His wealth of experience in information assurance and cyber security consulting as well as working in financial service sector are brought to bear on all his published materials/eBooks as an experience professional with practical/hands-on perspective. He holds a Higher National Diploma (HND) in Electrical/Electronics Engineering (Telecommunications) from Federal Polytechnic Nekede Owerri, a

Bachelor of Technology (B. Tech) degree in Information Management Technology (IMT) and recently completed Master of Science Degree (MSc) in Information Management Technology (IMT) from Federal University of Technology Owerri, Imo State. This is in addition to series of professional/technical training courses he has attended in the course of his career, which endorsing him as a subject matter expert in his chosen profession.

Nwabueze Ohia is passionate about giving back to the internet and the knowledgebase of his chosen profession, having greatly been enriched by same, which he has demonstrated through several writeups, articles and professional papers published on his website for other to read and be enriched including guest posting on other professional web platforms. He finds joy and fulfillment in extending helping hands to the needy and the downtrodden of our society. His hobbies are traveling round the world, soccer, lawn tennis and above all, web application development/programming. Born in 1983 to Nigerian parents from the Eastern part of the country, he is happily married with a daughter.

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Preface

By Nwabueze Ohia

UNIX operating system infrastructure are high processing, multiuser and multitasking computer systems that are developed for servers, desktops, laptops and mobile. They are widely deployed by most large corporations that perform high-end processing and multitasking operations such as financial institutions (banks, insurance, investment companies), telecommunication firms, social media network, etc. Unix operation systems are popular with mainframe computers and server-based systems with high processing capacity and speed requirements.

UNIX operating system are of different flares as pioneered by computing firms such as IBM, which has AIX UNIX flare, Oracle with Oracle UNIX flare (previously SUN Solaris), HP with HP UX flare of UNIX though they run basically on same principle with slight variations. UNIX systems are said to be more secured than other operating systems in the market due to command line structure although there are GUI versions of the operating system. This claim can be argued in various quarters as being more of a myth than reality, bring to the fore the saying that a system is as strong as its weakest link.

Despite the advantage of UNIX operating system environment as a high capacity processing and multitasking system, there exist some risks/vulnerabilities that are inherent in the infrastructure, which if not identified and adequately remediated could cause significant demand to organizations that deploy such system. This is couple with the threat of abuse or misuse of the system by operators and users. The risk associated with UNIX operating system infrastructure (be it AIX, Oracle UNIX or HP UX) would vary with organizations and largely depends on how the infrastructures were deployed. As such, it is important that personnel with security oversight responsibilities on the Unix infrastructure put in context organization's uniqueness as it relates to its information security policies, procedures, security baselines, regulatory and legal requirements while conducting their security assessment or reviews to know how best to protect them.

This book is therefore a documentation of risks and vulnerabilities associated with UNIX operating system infrastructure (IBM AIX, Oracle UNIX, HP UX), threats and threat agents that could exploit those weaknesses, their impact on the organization and actions required to mitigate the risks. It serves as a risk

assessment checklist/guide for risk assurance practitioners (IT Risk Manager, Cyber/Information Security Analysts, Information Systems Auditors and Systems Control Analysts) and enable them understand as well as identify some of the risks inherent in the UNIX infrastructure, implications/impact of such risks/vulnerabilities and ways to mitigate them. The book is a risk assessment checklist/program guide for risk assurance practitioners and provides unique/rich database of vulnerabilities/risk, control lapses, process failures and substandard practices associated with UNIX operation system infrastructure. This risk assessment checklist can easily be integrated with popular audit management software such as teammatessolutions or MKinsight.

Intended for organizations desirous of build a risk management program around their UNIX operating system infrastructure (IBM AIX, Oracle UNIX, HP UX) from the ground up or strengthen an existing one. Below is a sample page of the UNIX operating system infrastructure risk assessment checklist/program. For full access to the document, you can subscribe to our membership plan or purchase the book by click the Buy Now button below.