ad privileged access management

Securing the Crown Jewels: The Critical Importance of AD Privileged Access Management

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Edited by Mark Johnson, a seasoned cybersecurity journalist with 20 years of experience covering the IT security landscape. Mark has a deep understanding of IAM and PAM solutions and their impact on organizational security.

Abstract: This article delves into the critical role of Active Directory (AD) privileged access management (AD PAM) in modern cybersecurity. We will explore the challenges associated with managing privileged accounts within Active Directory, the implications of inadequate AD PAM strategies, and best practices for implementing a robust and effective AD PAM solution. We'll examine the shift in the industry towards more sophisticated and automated AD PAM solutions and discuss their impact on risk mitigation and operational efficiency.

1. Understanding the Landscape of AD Privileged Access Management

Active Directory (AD) serves as the backbone of many organizations' IT infrastructure, managing user identities and access rights. However, privileged accounts within AD – those with elevated permissions to perform sensitive tasks – represent a significant security vulnerability. Compromising a privileged AD account can grant attackers near-total control over the entire network. Effective AD privileged access management is, therefore, paramount. This involves implementing strategies and technologies to control, monitor, and audit access to these high-value accounts.

1. The Rising Tide of AD-Related Breaches

The increasing sophistication of cyberattacks, coupled with the growing reliance on AD, has led to a surge in breaches targeting privileged AD accounts. Attackers actively seek these accounts because they provide a powerful foothold for lateral movement and data exfiltration. The consequences can be devastating, leading to data loss, financial losses, reputational damage, and regulatory penalties.

1. Challenges in Traditional AD Privileged Access Management

Traditional approaches to AD PAM often rely on manual processes and shared accounts, creating significant security risks. These methods lack the visibility and control necessary to effectively manage privileged access. Furthermore, they are time-consuming, prone to errors, and difficult to scale in larger organizations.

1. The Shift Towards Automated AD Privileged Access Management

The industry is rapidly shifting towards automated AD privileged access management solutions. These solutions offer enhanced security through features such as:

Least privilege access: Granting users only the necessary privileges for their specific tasks.
Multi-factor authentication (MFA): Requiring multiple authentication factors to access privileged accounts, significantly reducing the risk of unauthorized access.
Just-in-time (JIT) privileged access: Providing temporary, time-limited access to privileged accounts, minimizing the window of vulnerability.
Session recording and auditing: Recording and auditing all privileged access sessions for compliance and forensic analysis.
Centralized management: Consolidating the management of privileged accounts in a centralized platform for improved visibility and control.
Automated account provisioning and de-provisioning: Automating the creation and removal of privileged accounts, reducing manual errors and improving efficiency.

1. Implementing a Robust AD Privileged Access Management Strategy

Implementing a robust AD PAM strategy requires a multi-faceted approach, encompassing:

Identifying and classifying privileged accounts: Creating an inventory of all accounts with elevated permissions.
Implementing strong password management policies: Enforcing complex, unique passwords and regular password changes.
Leveraging privileged access management solutions: Utilizing automated PAM tools to centralize management, monitor activity, and enforce security policies.
Regular security audits and vulnerability assessments: Identifying and addressing potential weaknesses in the AD environment.
Security awareness training: Educating employees about the importance of secure password practices and the risks associated with privileged accounts.

1. The Future of AD Privileged Access Management

The future of AD privileged access management is characterized by increased automation, integration with other security tools, and a focus on artificial intelligence (AI) and machine learning (ML) for threat detection and response. AI and ML can help automate the detection of suspicious activity, identify potential threats in real-time, and proactively mitigate risks.

1. The Business Impact of Effective AD Privileged Access Management

Investing in a robust AD privileged access management strategy is not just a security measure; it's a business imperative. By reducing the risk of breaches, organizations can protect their sensitive data, maintain their reputation, avoid regulatory fines, and ensure business continuity.

1. Conclusion:

AD privileged access management is a critical component of any comprehensive cybersecurity strategy. The challenges associated with managing privileged accounts within AD are significant, but the implementation of automated solutions and best practices can significantly mitigate these risks. By embracing a proactive and comprehensive approach to AD PAM, organizations can protect their valuable assets and maintain a strong security posture in an increasingly challenging threat landscape.

FAQs:

1. What is the difference between PAM and AD PAM? PAM is a broader term encompassing the management of all privileged accounts across an organization. AD PAM specifically focuses on managing privileged accounts within the Active Directory environment.

1. How can I identify privileged accounts in my AD? Utilize built-in AD tools and dedicated PAM solutions to identify accounts with administrative or domain-level privileges.

1. What are the key features of a good AD PAM solution? Key features include multi-factor authentication, just-in-time access, session recording, auditing, and centralized management.

1. What is the cost of implementing AD PAM? The cost varies depending on the size of the organization and the chosen solution, but the long-term benefits far outweigh the initial investment.

1. How can I integrate AD PAM with other security tools? Many modern AD PAM solutions offer seamless integration with other security tools such as SIEM, SOAR, and vulnerability scanners.

1. What are the regulatory compliance requirements related to AD PAM? Compliance requirements vary depending on the industry and region, but many regulations mandate strong access control and auditing capabilities.

1. How can I measure the effectiveness of my AD PAM strategy? Key metrics include the number of privileged accounts, the frequency of privileged access requests, and the number of security incidents related to privileged accounts.

1. What are the common mistakes to avoid when implementing AD PAM? Common mistakes include failing to properly identify all privileged accounts, relying on weak password policies, and neglecting regular security audits.

1. What is the role of AI/ML in future AD PAM solutions? AI/ML will play an increasingly important role in automating threat detection, response, and risk mitigation.

Related Articles:

1. "The Top 10 AD Privileged Account Security Threats and How to Mitigate Them": This article provides a detailed overview of the most common threats targeting privileged accounts in AD and offers practical mitigation strategies.

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1. "Best Practices for Securing Privileged Accounts in Hybrid Cloud Environments with AD": This article focuses on securing privileged accounts when organizations utilize both on-premises and cloud-based AD environments.

1. "Comparing Different AD Privileged Access Management Solutions": This article compares the features, functionalities, and pricing of different PAM solutions available on the market.

1. "The Role of Automation in Modern AD Privileged Access Management": This article explores the advantages of using automation to enhance efficiency and improve security in AD PAM.

1. "Addressing the Challenges of Password Management in AD Privileged Access": This article delves into the complexities of password management for privileged accounts and presents various solutions.

1. "Integrating AD Privileged Access Management with SIEM for Enhanced Threat Detection": This article explores the benefits of combining AD PAM with SIEM for improved threat detection and response.

1. "The Business Case for Investing in AD Privileged Access Management": This article makes a strong business case for investing in robust AD PAM solutions, highlighting the return on investment.

1. "Compliance Requirements and AD Privileged Access Management: A Detailed Overview": This article examines various regulatory compliance requirements related to AD PAM and how to ensure compliance.

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Learn Know how identities, accounts, credentials, passwords, and exploits can be leveraged to escalate privileges during an attack Implement defensive and monitoring strategies to mitigate privilege threats and risk Understand a 10-step universal privilege management implementation plan to guide you through a successful privilege access management journeyDevelop a comprehensive model for documenting risk, compliance, and reporting based on privilege session activity Who This Book Is For Security management professionals, new security professionals, and auditors looking to understand and solve privilege access management problems

ad privileged access management: Privileged Access Management for Secure Storage Administration: IBM Spectrum Scale with IBM Security Verify Privilege Vault Vincent Hsu, Sridhar Muppidi, Sandeep R. Patil, Kanad Jadhav, Sumit Kumar, Nishant Singhai, IBM Redbooks, 2021-01-08 There is a growing insider security risk to organizations. Human error, privilege misuse, and cyberespionage are considered the top insider threats. One of the most dangerous internal security threats is the privileged user with access to critical data, which is the crown jewels of the organization. This data is on storage, so storage administration has critical privilege access that can cause major security breaches and jeopardize the safety of sensitive assets. Organizations must maintain tight control over whom they grant privileged identity status to for storage administration. Extra storage administration access must be shared with support and services teams when required. There also is a need to audit critical resource access that is required by compliance to standards and regulations. IBM® SecurityTM Verify Privilege Vault On-Premises (Verify Privilege Vault), formerly known as IBM SecurityTM Secret Server, is the next-generation privileged account management that integrates with IBM Storage to ensure that access to IBM Storage administration sessions is secure and monitored in real time with required recording for audit and compliance. Privilege access to storage administration sessions is centrally managed, and each session can be timebound with remote monitoring. You also can use remote termination and an approval workflow for the session. In this IBM Redpaper, we demonstrate the integration of IBM Spectrum® Scale and IBM Elastic Storage® Server (IBM ESS) with Verify Privilege Vault, and show how to use privileged access management (PAM) for secure storage administration. This paper is targeted at storage and security administrators, storage and security architects, and chief information security officers.

ad privileged access management: Identity Attack Vectors Morey J. Haber, Darran Rolls, 2019-12-17 Discover how poor identity and privilege management can be leveraged to compromise accounts and credentials within an organization. Learn how role-based identity assignments, entitlements, and auditing strategies can be implemented to mitigate the threats leveraging accounts and identities and how to manage compliance for regulatory initiatives. As a solution, Identity Access Management (IAM) has emerged as the cornerstone of enterprise security. Managing accounts, credentials, roles, certification, and attestation reporting for all resources is now a security and compliance mandate. When identity theft and poor identity management is leveraged as an attack vector, risk and vulnerabilities increase exponentially. As cyber attacks continue to increase in volume and sophistication, it is not a matter of if, but when, your organization will have an incident. Threat actors target accounts, users, and their associated identities, to conduct their malicious activities through privileged attacks and asset vulnerabilities. Identity Attack Vectors details the risks associated with poor identity management practices, the techniques that threat actors and insiders leverage, and the operational best practices that organizations should adopt to protect against identity theft and account compromises, and to develop an effective identity governance program. What You Will Learn Understand the concepts behind an identity and how their associated credentials and accounts can be leveraged as an attack vector Implement an effective Identity Access Management (IAM) program to manage identities and roles, and provide certification for regulatory compliance See where identity management controls play a part of the cyber kill chain and how privileges should be managed as a potential weak link Build upon industry standards to integrate key identity management technologies into a corporate ecosystem Plan for a successful deployment, implementation scope, measurable risk reduction, auditing and discovery, regulatory reporting, and oversight based on real-world strategies to prevent

identity attack vectors Who This Book Is For Management and implementers in IT operations, security, and auditing looking to understand and implement an identity access management program and manage privileges in these environments

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scenarios to apply the required security functionality. Finally, get recommendations for planning and implementing a future-oriented and sustainable identity and access management strategy. Style and approach A practical, project-based learning experience explained through hands-on examples.

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components, such as forests, domains, sites, trust relationships, OU, objects, attributes, DNS, and replication. We will then move on to AD schemas, global catalogs, LDAP, RODC, RMS, certificate authorities, group policies, and security best practices, which will help you gain a better understanding of objects and components and how they can be used effectively. We will also cover AD Domain Services and Federation Services for Windows Server 2016 and all their new features. Last but not least, you will learn how to manage your identity infrastructure for a hybrid-cloud setup. All this will help you design, plan, deploy, manage operations on, and troubleshoot your enterprise identity infrastructure in a secure, effective manner. Furthermore, I will guide you through automating administrative tasks using PowerShell cmdlets. Toward the end of the book, we will cover best practices and troubleshooting techniques that can be used to improve security and performance in an identity infrastructure. Style and approach This step-by-step guide will help you master the core functionalities of Active Directory services using Microsoft Server 2016 and PowerShell, with real-world best practices at the end.

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cybersecurity success plan Who This Book Is For Chief Information Security Officers (CISOs) and other heads of security, security directors and managers, security architects and project leads, and other team members providing security leadership to your business

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ad privileged access management: Microsoft Identity Manager 2016 Handbook David Steadman, Jeff Ingalls, 2016-07-19 A complete handbook on Microsoft Identity Manager 2016 – from design considerations to operational best practices About This Book Get to grips with the basics of identity management and get acquainted with the MIM components and functionalities Discover the

newly-introduced product features and how they can help your organization A step-by-step guide to enhance your foundational skills in using Microsoft Identity Manager from those who have taught and supported large and small enterprise customers Who This Book Is For If you are an architect or a developer who wants to deploy, manage, and operate Microsoft Identity Manager 2016, then this book is for you. This book will also help the technical decision makers who want to improve their knowledge of Microsoft Identity Manager 2016. A basic understanding of Microsoft-based infrastructure using Active Directory is expected. Identity management beginners and experts alike will be able to apply the examples and scenarios to solve real-world customer problems. What You Will Learn Install MIM components Find out about the MIM synchronization, its configuration settings, and advantages Get to grips with the MIM service capabilities and develop custom activities Use the MIM Portal to provision and manage an account Mitigate access escalation and lateral movement risks using privileged access management Configure client certificate management and its detailed permission model Troubleshoot MIM components by enabling logging and reviewing logs Back up and restore the MIM 2015 configuration Discover more about periodic purging and the coding best practices In Detail Microsoft Identity Manager 2016 is Microsoft's solution to identity management. When fully installed, the product utilizes SQL, SharePoint, IIS, web services, the .NET Framework, and SCSM to name a few, allowing it to be customized to meet nearly every business requirement. The book is divided into 15 chapters and begins with an overview of the product, what it does, and what it does not do. To better understand the concepts in MIM, we introduce a fictitious company and their problems and goals, then build an identity solutions to fit those goals. Over the course of this book, we cover topics such as MIM installation and configuration, user and group management options, self-service solutions, role-based access control, reducing security threats, and finally operational troubleshooting and best practices. By the end of this book, you will have gained the necessary skills to deploy, manage and operate Microsoft Identity Manager 2016 to meet your business requirements and solve real-world customer problems. Style and approach The concepts in the book are explained and illustrated with the help of screenshots as much as possible. We strive for readability and provide you with step-by-step instructions on the installation, configuration, and operation of the product. Throughout the book, you will be provided on-the-field knowledge that you won't get from whitepapers and help files.

ad privileged access management: Mastering Active Directory Dishan Francis, 2019-08-09 Become an expert at managing enterprise identity infrastructure by leveraging Active Directory Key Features Explore the new features in Active Directory Domain Service Manage your Active Directory services for Windows Server 2016 effectively Automate administrative tasks in Active Directory using PowerShell Core 6.x Book Description Active Directory (AD) is a centralized and standardized system that automates networked management of user data, security, and distributed resources and enables inter-operation with other directories. This book will first help you brush up on the AD architecture and fundamentals, before guiding you through core components, such as sites, trust relationships, objects, and attributes. You will then explore AD schemas, LDAP, RMS, and security best practices to understand objects and components and how they can be used effectively. Next, the book will provide extensive coverage of AD Domain Services and Federation Services for Windows Server 2016, and help you explore their new features. Furthermore, you will learn to manage your identity infrastructure for a hybrid cloud setup. All this will help you design, plan, deploy, manage operations, and troubleshoot your enterprise identity infrastructure in a secure and effective manner. You'll later discover Azure AD Module, and learn to automate administrative tasks using PowerShell cmdlets. All along, this updated second edition will cover content based on the latest version of Active Directory, PowerShell 5.1 and LDAP. By the end of this book, you'll be well versed with best practices and troubleshooting techniques for improving security and performance in identity infrastructures. What you will learn Design your Hybrid AD environment by evaluating business and technology requirements Protect sensitive data in a hybrid environment using Azure Information Protection Explore advanced functionalities of the schema Learn about Flexible Single Master Operation (FSMO) roles and their placement Install and migrate Active Directory from older

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Identity and access management are at the heart of Microsoft's software as service products, including Office 365, Dynamics CRM, and Enterprise Mobility Management. It is crucial to master Microsoft Azure in order to be able to work with the Microsoft Cloud effectively. You'll begin by identifying the benefits of Microsoft Azure in the field of identity and access management. Working through the functionality of identity and access management as a service, you will get a full overview of the Microsoft strategy. Understanding identity synchronization will help you to provide a well-managed identity. Project scenarios and examples will enable you to understand, troubleshoot, and develop on essential authentication protocols and publishing scenarios. Finally, you will acquire a thorough understanding of Microsoft Information protection technologies. What you will learnApply technical descriptions to your business needs and deploymentsManage cloud-only, simple, and complex hybrid environmentsApply correct and efficient monitoring and identity protection strategiesDesign and deploy custom Identity and access management solutionsBuild a complete identity and access management life cycleUnderstand authentication and application publishing mechanismsUse and understand the most crucial identity synchronization scenariosImplement a suitable information protection strategyWho this book is for This book is a perfect companion for developers, cyber security specialists, system and security engineers, IT consultants/architects, and system administrators who are looking for perfectly up–to-date hybrid and cloud-only scenarios. You should have some understanding of security solutions, Active Directory, access privileges/rights, and authentication methods. Programming knowledge is not required but can be helpful for using PowerShell or working with APIs to customize your solutions.

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topology and customers' needs. ● Secure and automate infrastructure management. ● Get familiar with interview questions that are related to the AD and PowerShell related jobs market. WHO THIS BOOK IS FOR This book is for junior system administrators or students who would like to learn about Active Directory or for readers who want to become Active Directory engineers. TABLE OF CONTENTS 1. Introduction 2. Setting up the Development Environment 3. Active Directory Environment Creation 4. Active Directory Environment Configuration 5. Active Directory User Management 6. Active Directory Group Management 7. Active Directory Security Management 8. Monitor Active Directory 9. Active Directory Disaster Recovery 10. Manage Windows Server Using PowerShell 11. Securing PowerShell for AD Management 12. PowerShell DSC for AD Configuration Management 13. Interview Questions

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systems from being compromised by intruders? This updated second edition is a detailed guide that helps you gain the expertise to implement efficient security measures and create robust defense solutions using modern technologies. The first part of the book covers security fundamentals with details around building and implementing baseline controls. As you advance, you'll learn how to effectively secure and harden your Windows-based systems through hardware, virtualization, networking, and identity and access management (IAM). The second section will cover administering security controls for Windows clients and servers with remote policy management using Intune, Configuration Manager, Group Policy, Defender for Endpoint, and other Microsoft 365 and Azure cloud security technologies. In the last section, you'll discover how to protect, detect, and respond with security monitoring, reporting, operations, testing, and auditing. By the end of this book, you'll have developed an understanding of the processes and tools involved in enforcing security controls and implementing zero-trust security principles to protect Windows systems.What you will learn Build a multi-layered security approach using zero-trust concepts Explore best practices to implement security baselines successfully Get to grips with virtualization and networking to harden your devices Discover the importance of identity and access management Explore Windows device administration and remote management Become an expert in hardening your Windows infrastructure Audit, assess, and test to ensure controls are successfully applied and enforced Monitor and report activities to stay on top of vulnerabilities Who this book is for If you're a cybersecurity or technology professional, solutions architect, systems engineer, systems administrator, or anyone interested in learning how to secure the latest Windows-based systems, this book is for you. A basic understanding of Windows security concepts, Intune, Configuration Manager, Windows PowerShell, and Microsoft Azure will help you get the best out of this book.

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helping you change the mindset of others, and getting them to understand why Zero Trust isn't simply a conversation to be had, but a movement to embrace. Origins of the Zero Trust philosophy in security architecture explained, and why it took so long to catch on Detailed examination of how to ask the right questions so as to implement the right security answers for clients Understanding the metrics by which to measure Zero Trust success, and what maintaining that success looks like Identifying the stakeholders and empowering a Zero Trust team within an enterprise Examples of how to catalyze opinion and tailor tactics to motivate investment in secure Zero Trust architecture Implement, monitor, feedback, repeat: Presenting and building a roadmap for a sustainable security architecture Looking ahead to a Zero Trust Lifecycle Framework and a blueprint for the future

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resource that explores management of an organization’s identities, credentials, and attributes which assures the identity of a user in an extensible manner set for identity and access administration. Featuring coverage on a broad range of topics, such as biometric application programming interfaces, telecommunication security, and role-based access control, this book is geared towards academicians, practitioners, and researchers seeking current research on identity and access management.

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guide is your roadmap to success in the AZ-500 exam and beyond!

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stack in addition to specific services Delve into newer and frequently shifting areas such as Power Platform, Microsoft Teams, and Microsoft Search administration Discover carefully selected techniques that cover a range of administrative tasks of varying difficulty levels Book DescriptionOrganizations across the world have switched to Office 365 to boost workplace productivity. However, to maximize investment in Office 365, you need to know how to efficiently administer Office 365 solutions. Microsoft Office 365 Administration Cookbook is packed with recipes to guide you through common and not-so-common administrative tasks throughout Office 365. Whether you're administering a single app such as SharePoint or organization-wide Security & Compliance across Office 365, this cookbook offers a variety of recipes that you'll want to have to hand. The book begins by covering essential setup and administration tasks. You'll learn how to manage permissions for users and user groups along with automating routine admin tasks using PowerShell. You'll then progress through to managing core Office 365 services such as Exchange Online, OneDrive, SharePoint Online, and Azure Active Directory (AD). This book also features recipes that'll help you to manage newer services such as Microsoft Search, Power Platform, and Microsoft Teams. In the final chapters, you'll delve into monitoring, reporting, and securing your Office 365 services. By the end of this book, you'll have learned about managing individual Office 365 services along with monitoring, securing, and optimizing your entire Office 365 deployment efficiently.What you will learn Get to grips with basic Office 365 setup and routine administration tasks Manage Office 365 identities and groups efficiently and securely Harness the capabilities of PowerShell to automate common administrative tasks Configure and manage core Office 365 services such as Exchange Online, SharePoint, and OneDrive Configure and administer fast-evolving services such as Microsoft Search, Power Platform, Microsoft Teams, and Azure AD Get up and running with advanced threat protection features provided by the Microsoft 365 Security & Compliance Center Protect your organization's sensitive data with Office 365 Data Loss Prevention Monitor activities and behaviors across all Office 365 services Who this book is for This book is for newer Office 365 administrators and IT pros alike, and comes with recipes of varying difficulty levels along with step-by-step guidance. Whether you are new to Office 365 administration or just seeking new ideas, this cookbook contains recipes to enhance your organization's app and service management and productivity.

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interested in securing their Azure infrastructure and keeping up with the latest updates. Complete with hands-on tutorials, projects, and self-assessment questions, this easy-to-follow guide builds a solid foundation of Azure security. You'll not only learn about security technologies in Azure but also be able to configure and manage them. Moreover, you'll develop a clear understanding of how to identify different attack vectors and mitigate risks. By the end of this book, you'll be well-versed with implementing multi-layered security to protect identities, networks, hosts, containers, databases, and storage in Azure – and more than ready to tackle the AZ-500. What you will learnManage users, groups, service principals, and roles effectively in Azure ADExplore Azure AD identity security and governance capabilitiesUnderstand how platform perimeter protection secures Azure workloadsImplement network security best practices for IaaS and PaaSDiscover various options to protect against DDoS attacksSecure hosts and containers against evolving security threatsConfigure platform governance with cloud-native toolsMonitor security operations with Azure Security Center and Azure SentinelWho this book is for This book is a comprehensive resource aimed at those preparing for the Azure Security Engineer (AZ-500) certification exam, as well as security professionals who want to keep up to date with the latest updates. Whether you're a newly qualified or experienced security professional, cloud administrator, architect, or developer who wants to understand how to secure your Azure environment and workloads, this book is for you. Beginners without foundational knowledge of the Azure cloud platform might progress more slowly, but those who know the basics will have no trouble following along.

ad privileged access management: Active Directory Administration Cookbook Sander Berkouwer, 2022-07-15 Simplified actionable recipes for managing Active Directory and Azure AD, as well as Azure AD Connect, for administration on-premise and in the cloud with Windows Server 2022 Key Features • Expert solutions for name resolution, federation, certificates, and security with Active Directory • Explore Microsoft Azure AD and Azure AD Connect for effective administration on the cloud • Automate security tasks using Active Directory tools and PowerShell Book Description Updated to the Windows Server 2022, this second edition covers effective recipes for Active Directory administration that will help you leverage AD's capabilities for automating network, security, and access management tasks in the Windows infrastructure. Starting with a detailed focus on forests, domains, trusts, schemas, and partitions, this book will help you manage domain controllers, organizational units, and default containers. You'll then explore Active Directory sites management as well as identify and solve replication problems. As you progress, you'll work through recipes that show you how to manage your AD domains as well as user and group objects and computer accounts, expiring group memberships, and Group Managed Service Accounts (gMSAs) with PowerShell. Once you've covered DNS and certificates, you'll work with Group Policy and then focus on federation and security before advancing to Azure Active Directory and how to integrate on-premise Active Directory with Azure AD. Finally, you'll discover how Microsoft Azure AD Connect synchronization works and how to harden Azure AD. By the end of this AD book, you'll be able to make the most of Active Directory and Azure AD Connect. What you will learn • Manage the Recycle Bin, gMSAs, and fine-grained password policies • Work with Active Directory from both the graphical user interface (GUI) and command line • Use Windows PowerShell to automate tasks • Create and remove forests, domains, domain controllers, and trusts • Create groups, modify group scope and type, and manage memberships • Delegate, view, and modify permissions • Set up, manage, and optionally decommission certificate authorities • Optimize Active Directory and Azure AD for security Who this book is for This book is for administrators of existing Active Directory Domain Service environments as well as for Azure AD tenants looking for guidance to optimize their day-to-day tasks. Basic networking and Windows Server Operating System knowledge will be useful for getting the most out of this book.

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build robust security into your designs, use proven best practices across the entire development lifecycle, and combine multiple Azure services to optimize security. Now, a team of leading Azure security experts shows how to do just that. Drawing on extensive experience securing Azure workloads, the authors present a practical tutorial for addressing immediate security challenges, and a definitive design reference to rely on for years. Learn how to make the most of the platform by integrating multiple Azure security technologies at the application and network layers— taking you from design and development to testing, deployment, governance, and compliance. About You This book is for all Azure application designers, architects, developers, development managers, testers, and everyone who wants to make sure their cloud designs and code are as secure as possible. Discover powerful new ways to: Improve app / workload security, reduce attack surfaces, and implement zero trust in cloud code Apply security patterns to solve common problems more easily Model threats early, to plan effective mitigations Implement modern identity solutions with OpenID Connect and OAuth2 Make the most of Azure monitoring, logging, and Kusto queries Safeguard workloads with Azure Security Benchmark (ASB) best practices Review secure coding principles, write defensive code, fix insecure code, and test code security Leverage Azure cryptography and confidential computing technologies Understand compliance and risk programs Secure CI / CD automated workflows and pipelines Strengthen container and network security

ad privileged access management: The Ins and Outs of Azure VMware Solution Dr. Kevin Jellow D.H.L (h.c), 2023-01-06 Manage VMware workloads in Azure VMware Solution and enable hybrid connectivity between on-premises datacenters and Azure with this extensive guide focusing on best practices and use cases Key FeaturesExtend or migrate your existing VMware environment to Azure VMware Solution smoothlyDiscover best practices that are based on real customer experiencesJoin the cloud revolution by conducting the most suitable migration for your workloadsBook Description Organizations over the world are migrating partially or fully to the cloud, but with the whole slew of providers, tools, and platforms available, knowing where to start can be quite challenging. If you know Microsoft Azure VMware Solution, you know it is the quickest way to migrate to the cloud without needing application modernization or rework. You can retain the same VMware tools to manage your environment while moving to Azure. But how does it work? The Ins and Outs of Azure VMware Solution has the answer. This high-level, comprehensive yet concise guide to Azure VMware Solution starts by taking you through the architecture and its applicable use cases. It will help you hit the ground running by getting straight to the important steps: planning, deploying, configuring, and managing your Azure VMware Solution instance. You'll be able to extend your existing knowledge of Azure and VMware by covering advanced topics such as SRM and governance, setting up a hybrid connection to your on-premises datacenter, and scaling up using disk pools. By the end of the VMware book, you'll have gone over everything you need to transition to the cloud with ease using Azure VMware Solution. What you will learnGet to grips with the overall architecture of Azure VMware SolutionDiscover Enterprise-scale for Azure VMware SolutionDeploy an Azure VMware private cloud successfullyDeploy and configure HCX in Azure VMware SolutionConfigure NSX-T network segments with the NSX-T ManagerConfigure internet access, traffic inspection, and storage for AVSIntegrate Azure VMware Solution with Azure-native servicesUse governance to improve your cloud portfolioWho this book is for This book is for VMware administrators, cloud solutions architects, and anyone interested in learning how to deploy and configure an AVS environment in Azure. Technology leaders who want to get out of the datacenter business or expand their on-premises datacenter into Microsoft Azure will also find this book useful. Familiarity with VMware solutions and a basic understanding of Azure networking is necessary to get started with this book.

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