–**NEW!** —— Essential information on the current state of identity management

MECHANICS OF USER IDENTIFICATION AND AUTHENTICATION

Fundamentals of Identity Management

Dobromir Todorov

Security Consultant, United Kingdom

Investigates user identification and authentication issues and challenges

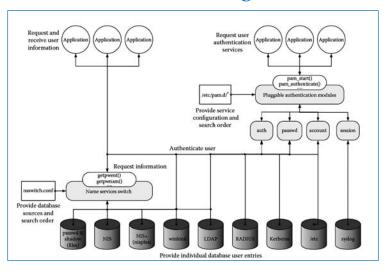
User identification and authentication are essential parts of information security. Users must authenticate as they access their computer systems at work or at home every day. Yet do users understand how and why they are actually being authenticated, the security level of the authentication mechanism that they are using, and the potential impacts of selecting one authentication mechanism or another?

Introducing key concepts, Mechanics of User Identification and Authentication: Fundamentals of Identity Management outlines the process of controlled access to resources through authentication, authorization, and accounting in an in-depth, yet accessible manner. It examines today's security landscape and the specific threats to user authentication. The book then outlines the process of controlled access to resources and discusses the types of user credentials that can be presented as proof of identity prior to accessing a computer system. It also contains an overview on cryptography that includes the approaches and terms required for understanding how user authentication works.

This book provides specific information on the user authentication process for both UNIX and Windows. Addressing more advanced applications and services, the author presents common security models such as GSSAPI and discusses authentication architecture. Each method is illustrated with a specific authentication scenario.

Features

- Addresses the advantages and disadvantages of different user authentication strategies
- Demonstrates how to match user authentication and access needs with the needs of the organization
- Presents specific information on the implementation of user authentication protocols with different systems
- Includes case studies that illustrate practical applications



UNIX user authentication overview.

Contents

USER IDENTIFICATION AND AUTHENTICATION CONCEPTS

Security Landscape

Authentication, Authorization, and Accounting Threats to User Identification and Authentication Authentication Credentials

Enterprise User Identification and Authentication Challenges

Authenticating Access to Services and the Infrastructure Delegation and Impersonation

Cryptology, Cryptography, and Cryptanalysis

UNIX USER AUTHENTICATION ARCHITECTURE

Users and Groups Simple User Credential Stores Name Services Switch (NSS) Pluggable Authentication Modules (PAM)

See reverse side for continued contents

Catalog no. AU5219, June 2007, 728 pp. ISBN: 978-1-4200-5219-0, \$79.95 / £44.99



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The UNIX Authentication Process User Impersonation

Case Study: User Authentication Against LDAP

Case Study: Using Hesiod for User Authentication in Linux

WINDOWS USER AUTHENTICATION ARCHITECTURE

Security Principals Stand-Alone Authentication Windows Domain Authentication Federated Trusts Impersonation

AUTHENTICATING ACCESS TO SERVICES AND APPLICATIONS

Security Programming Interfaces Authentication Protocols Transport Layer Security (TLS) and Secure Sockets Layer (SSL)

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FTP Authentication

HTTP Authentication

POP3/IMAP Authentication

SMTP Authentication

LDAP Authentication

SSH Authentication

Sun RPC Authentication

SMB/CIFS Authentication

NFS Authentication

Microsoft Remote Procedure Calls

MS SQL Authentication

Oracle Database Server

Authentication

MS Exchange MAPI Authentication SAML, WS-Security, and Federated Identity

AUTHENTICATING ACCESS TO THE INFRASTRUCTURE

User Authentication on Cisco Routers and Switches

Authenticating Remote Access to the Infrastructure

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Authenticating Access to the

Wireless Infrastructure

IPSec, IKE, and VPN Client

Authentication

Centralized User Authentication

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