

1. Record Nr.	UNINA9910461427803321
Autore	Froehlich Andrew G
Titolo	CVOICE 8.0 [[electronic resource]] : implementing Cisco Unified Communications Voice over IP and QoS v8.0 : study guide // Andrew Froehlich
Pubbl/distr/stampa	Indianapolis, : Wiley Pub., Inc., 2011
ISBN	1-283-29507-5 9786613295071 1-118-18143-3
Edizione	[1st ed.]
Descrizione fisica	1 online resource (626 p.)
Disciplina	621.38212
Soggetti	Internet telephony - Examinations Electronic data processing personnel - Certification Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Exam 642-437"--Cover. Includes index.
Nota di bibliografia	Includes index.
Nota di contenuto	CVOICE 8.0: Implementing Cisco Unified Communications Voice over IP and QoS v8.0; Contents; Introduction; Assessment Test; Chapter 1: An Introduction to Traditional Telephony and Cisco Unified Communications; Understanding Traditional Telephony Components; Telephony Edge Devices; Phone Switches; The Central Office; The Local Loop; Trunks; National and International Calling PSTN; Understanding Private Telephony Phone Systems; Key System; PBX; Understanding the Unified Communications Model; Endpoints; Applications; Call Processing Agents; Network Infrastructure Unified Communications Deployment Models The Centralized Services Deployment Model; The Distributed Services Deployment Model; The Inter-Networking of Services Deployment Model; The Geographical Diversity Deployment Model; Summary; Exam Essentials; Written Lab 1.1; Review Questions; Answers to Review Questions; Answers to Written Lab 1.1; Chapter 2: Understanding Analog and Digital Voice; Understanding Analog Voice Ports and Signaling; Analog Voice Port Types; Analog Voice Signaling; Basic Configuration of Analog Voice

Ports; Understanding Digital Voice Ports and Signaling

An Overview of the Analog-to-Digital Conversion Process Digital Voice Port Types; Digital Voice Multiplexing, Framing, and Physical Transport; Digital Voice Signaling; Basic Configuration of Digital Voice Ports; Summary; Exam Essentials; Written Lab 2.1; Review Questions; Answers to Review Questions; Answers to Written Lab 2.1; Chapter 3: VoIP Operation and Protocols; Voice Media Transmission Protocols; Introduction to the Real-Time Transport Protocol; Introduction to the Real-time Transport Control Protocol; Introduction to Compressed RTP; Introduction to Secure RTP

Voice Gateway Signaling ProtocolsH. 323; Session Initiation Protocol; Media Gateway Control Protocol; Skinny Client Control Protocol; Voice Gateway Signaling Protocol Comparison; An Introduction to Gatekeepers and Other H. 323 Components; Gatekeeper; H. 323 Proxy Server; H. 323 Multipoint Control Unit; A Typical H. 323 Network; Choosing the Appropriate Voice Gateway Signaling Protocol; Summary; Exam Essentials; Written Lab 3.1; Review Questions; Answers to Review Questions; Answers to Written Lab 3.1; Chapter 4: The VoIP Path-Selection Process

Understanding the Dial Plan Path-Selection Process Understanding Voice Call Types; Path Selection and Call Routing; POTS and VoIP Dial Peers; Call Legs; Path-Selection Strategies; Introduction to PSTN and Private Numbering Plans; Using Wildcards to Simplify Dial-Peer Configurations; Site-Code Dialing; Dial-Plan Digit Manipulation; Digit Stripping; Forwarding the Last X Digits; Prefix Adding; Number Substitution; Translation Rules and Profiles; Verifying Dial-Plan Configurations; Summary; Exam Essentials; Written Lab 4.1; Review Questions; Answers to Review Questions; Answers to Written Lab 4.1 Chapter 5: VoIP Design Options

Sommario/riassunto

VoIP and convergence are hot topics, and the CVOICE 8.0 exam targets candidates looking to pass Exam 642-437 and pursue their CCNP Voice certification. Companies continue to add VoIP service at a record pace, and network administrators are ramping up their skills. This new member of the Sybex Study Guide series covers everything you'll need to know to pass the certification exam. VoIP (Voice over IP) is rapidly becoming a preferred solution for companies, and Cisco has responded to the need with a new certification to assure proficiency in VoIP technology Prepares IT pr

2. Record Nr.	UNINA9910633914703321
Titolo	The mathematics of marine modelling : water, solute and particle dynamics in estuaries and shallow seas / / Henk Schuttelaars, Arnold Heemink, Eric Deleersnijder, editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	3-031-09559-6
Descrizione fisica	1 online resource (324 pages)
Collana	Mathematics of Planet Earth ; ; v.9
Disciplina	551.460015118
Soggetti	Oceanography - Mathematical models Approximation theory Mathematical analysis Oceanografia Models matemàtics Teoria de l'aproximació Anàlisi matemàtica Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Contents -- Contributors -- 1 Basic Equations of Marine Flows -- 1.1 Mathematical Description of Fluids -- 1.1.1 Fluids as Continuous Media -- 1.1.2 Integral and Differential Formulations -- 1.1.3 Averaging of Turbulent Flows -- 1.2 Governing Equations -- 1.2.1 Volume Conservation -- 1.2.2 Salt Conservation -- 1.2.3 Heat Balance -- 1.2.4 Momentum Balance -- 1.2.5 Common Formulations and Closures -- 1.3 Summary -- References -- 2 Water Waves in Isotropic and Anisotropic Media: A comparison -- 2.1 Introduction -- 2.2 Gravity Waves -- 2.2.1 Surface Gravity Waves in Homogeneous Fluids -- 2.2.2 Gravity Waves in Heterogeneous Media -- 2.3 Inertial Waves -- 2.3.1 Waves in Shear Flows -- 2.3.2 Waves in Rotating Basins -- 2.3.3 Three-dimensional Effects -- 2.4 Discussion -- 2.4.1 The Linear Shear Flow as 'Problematic' Equilibrium -- 2.4.2 Waves in Anisotropic Media -- 2.4.3 Mixing Due to Wave Focusing and Mean

Flows -- 2.5 Conclusion -- References -- 3 A Review of Nonlinear Boussinesq-Type Models for Coastal Ocean Modeling -- 3.1 Introduction -- 3.2 The Water Wave Problem -- 3.2.1 Dispersive Properties of the Linear Waves -- 3.2.2 Scaling of Variables and Operators -- 3.2.3 Nondimensionalization of Equations -- 3.2.4 Green-Naghdi Equation -- 3.3 A Finite Element Discretization of the Green-Naghdi Equation -- 3.3.1 Notation -- 3.3.2 Functional Setting -- 3.3.3 Variational Formulation and Solution Procedure -- 3.4 Numerical Results -- 3.5 Conclusions -- References -- 4 Tides in Coastal Seas. Influence of Topography and Bottom Friction -- 4.1 Introduction -- 4.2 Model Formulation -- 4.3 Fundamental Wave Solutions -- 4.3.1 Derivation with Klein-Gordon Equation -- 4.3.2 Kelvin Wave -- 4.3.3 Poincaré Waves -- 4.3.4 Wave Solutions with a Transverse Topographic Step -- 4.4 Amphidromic Patterns in Semi-enclosed Basins. 4.4.1 Superposition of Two Kelvin Waves -- 4.4.2 Solution to Extended Taylor Problem -- 4.4.3 Application to Basins Around the World -- 4.5 Discussion -- 4.6 Conclusions -- References -- 5 Variational Water-Wave Modeling: From Deep Water to Beaches -- 5.1 Introduction -- 5.2 Derivation of Luke's Variational Principle -- 5.3 Transformed Luke's/Miles' Variational Principles with Wavemaker -- 5.3.1 FEM and Mesh Motion -- 5.3.2 Numerical Results: Comparison with Wave-Tank Experiments -- 5.4 Coupling Water Waves to Shallow-Water Beach Hydraulics -- 5.4.1 Numerical Results: Damping of Waves on the Beach -- 5.5 Summary and Conclusions -- References -- 6 Quasi-2D Turbulence in Shallow Fluid Layers -- 6.1 Introduction -- 6.2 Two-Dimensional Turbulence -- 6.2.1 Inertial Ranges in 2D Turbulence -- 6.2.2 2D Turbulence: The Early Years -- 6.2.3 Coherent Structures and 2D Turbulence -- 6.3 2D Turbulence in Square, Rectangular and Circular Domains -- 6.3.1 Simulations of 2D Turbulence in Domains with No-Slip Walls -- 6.3.2 Quasi-Steady Final States: Laboratory Experiments -- 6.3.3 Forced 2D Turbulence on Confined Domains -- 6.4 Interaction of Vortices with Walls -- 6.4.1 No-Slip Walls as Vorticity Sources -- 6.4.2 Vorticity Production by Dipole-Wall Collisions -- 6.5 Review of 2D Turbulence Experiments in Shallow Fluids -- 6.5.1 Laboratory Experiments in Shallow Fluid Layers -- 6.5.2 2D Turbulence with Rayleigh Friction -- 6.5.3 Secondary Flows in Quasi-2D Turbulence in Thin Fluid Layers -- 6.5.4 Concluding Remarks -- 6.6 Summary -- References -- 7 Turbulent Dispersion -- 7.1 Introduction -- 7.2 Model Requirements -- 7.3 Model Development -- 7.4 Reduction to One Dimension with Boundaries -- 7.5 Application to Dispersion in Turbulent Jets -- 7.5.1 Turbulent Round Jet -- 7.5.2 Turbulent Planar Jet -- 7.6 Turbulent Flow along a Wall-The Logarithmic Velocity Profile. 7.7 Application to the Marine Ekman Layer -- 7.7.1 Surface Ekman Layer -- 7.7.2 Bottom Ekman Layer -- 7.8 Conclusions -- References -- 8 Spreading and Mixing in Near-Field River Plumes -- 8.1 Introduction -- 8.2 Dynamical Regions -- 8.3 A Simple Near-Field Plume Model -- 8.4 Complications to The Simple Plume Model -- 8.4.1 Local Mixing Parameterization -- 8.4.2 Plume Frontal Mixing -- 8.4.3 Rotation and Return to Geostrophy -- 8.5 Conclusions -- References -- 9 Lagrangian Modelling of Transport Phenomena Using Stochastic Differential Equations -- 9.1 Introduction -- 9.2 Stochastic Differential Equations -- 9.2.1 Introduction -- 9.2.2 Itô Stochastic Integrals -- 9.2.3 Itô Stochastic Differential Equations -- 9.2.4 Itô's Differentiation Rule -- 9.2.5 Stratonovich Stochastic Differential Equations -- 9.2.6 Fokker-Planck Equation -- 9.3 Particle Models for Marine Transport Problems -- 9.4 Numerical Approximation of Stochastic Differential

Equations -- 9.5 Test Cases for Marine Transport Problems -- 9.5.1
Simple Vertical Diffusion -- 9.5.2 One Dimensional Water Column
Including a Pycnocline -- 9.5.3 Multidimensional Diffusion in an
Unbounded Domain -- 9.6 Conclusion -- References -- 10
Morphodynamic Modelling in Marine Environments: Model Formulation
and Solution Techniques -- 10.1 Introduction -- 10.2 Morphodynamic
Modelling Approaches -- 10.3 Process-Based Models -- 10.3.1
Mathematical Formulation of Simulation Models -- 10.3.2 Mathematical
Formulation of Exploratory Models -- 10.4 Solution Procedure --
10.4.1 Initial Value Approach -- 10.4.2 Bifurcation Approach -- 10.5
Example: Morphodynamics of Tidal Inlet Systems -- 10.5.1
Introduction -- 10.5.2 Cross-Sectionally Averaged Morphodynamic
Equilibria -- 10.5.3 Depth-Averaged Morphodynamic Equilibria -- 10.6
Summary and Conclusions -- References.
11 Wetting and Drying Procedures for Shallow Water Simulations --
11.1 Introduction -- 11.2 Governing Equations -- 11.3 Space
Discretization -- 11.3.1 Finite Volume Methods -- 11.3.2
Discontinuous Galerkin Schemes -- 11.4 Time Discretization -- 11.4.1
Explicit Time Integration -- 11.4.2 Implicit Time Integration -- 11.5
Concluding Remarks -- References -- Appendix Index -- Index.
