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Nota di contenuto	Front Cover; Dedication; Practical Guide to Clinical Computing Systems: Design, Operations, and Infrastructure; Copyright; Contents; Contributors; Preface to the Second Edition; Preface to the First Edition; Chapter 1: Introduction and Overview of Clinical Computing Systems within a Medical Center; 1. The healthcare setting; 2. Rising dependence on clinical computing systems; 3. The importance of computing operations and support; 4. Importance of monitoring performance; 5. Real-world problems and their implications; 6. Introducing clinical computing systems can introduce errors 7. We need greater emphasis on safe operations of clinical computing systemsReferences; Chapter 2: Architecture of Clinical Computing Systems; 1. What is architecture, and why is it important?; 2. Architectural models; 3. Architecture of computing systems in healthcare organizations; 3.1. Core EHR (Electronic Health Record) Systems; 3.2. Departmental Systems; 3.2.1. Foundational Systems; 3.2.2. Data Repositories; 3.3. Interface Engines; 3.4. Networks, Hosts, Servers, ""Middleware,"" Workstations; 3.5. Best of Breed versus Suite from a Single Vendor 4. End-user applications: strengths/weaknesses of web and other development choices4.1. Application Delivery; 5. Examples of clinical computing architectures; References; Chapter 3: Creating and Supporting Interfaces; 1. Integrating and interfacing applications; 1.1.

What Do We Mean by Integration?; 2. HL7 in the real-world; 2.1. Integration before HL7; 2.2. What HL7 Stands for; 2.3. HL7 Definition, History, and Evolution; 2.4. HL7 Communication Protocols; 3. What is needed to succeed with interface development; 3.1. Foundation; 3.2. Interface Engines; 3.3. Interface Development  
3.3.1. Interface Development Methodology  
3.4 Why isn't Developing an HL7 Interface Easier?; 4. Other standards; 4.1. X12; 4.2. DICOM; 4.3. Application Level Standards; 4.4. Arden Syntax; 5. Data exchange and meaningful use; 6. Final thoughts regarding interfaces; References;  
Chapter 4: Infrastructure; 1. Introduction; 2. Data centers; 2.1. Electrical Power; 2.2. Power Distribution and Backup Power; 2.3. Cooling; 2.4. Data Center Reliability; 2.5. Environmental Protection and Data Center Security; 2.6. Data Center Management and Remote Data Centers; 2.7. Future of Data Centers  
3. Servers, operating systems, and databases  
4. Managing the desktop and other clients; 4.1. Standardizing Desktop Configurations; 4.2. Patching, Updating, Cloning, and Inventory; 4.3. Life Cycle and Desktop Replacement; 4.4. Windows, Linux, and Mac OS Clients; 4.5. Virtual Desktops, Single Sign-on, and other Desktop Support Middleware; 5. Backup, redundancy, disaster planning, and recovery; 5.1. Reliability, Availability, and Redundancy; 5.2. Availability, Failures, and Backups; 5.3. Disasters, Disaster Recovery, and Business Continuity; 6. Operations; 6.1. Daily Operations  
6.2. Infrastructure Support and other Related Activities

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## Sommario/riassunto

Although informatics trainees and practitioners who assume operational computing roles in their organization may have reasonably advanced understanding of theoretical informatics, many are unfamiliar with the practical topics - such as downtime procedures, interface engines, user support, JCAHO compliance, and budgets - which will become the mainstay of their working lives. Practical Guide to Clinical Computing Systems 2nd edition helps prepare these individuals for the electronic age of health care delivery. It is also designed for those who migrate into clinical computing operations roles

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