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Nota di contenuto	Intro -- Preface -- Audience -- What is Unique About This Book? -- The Virtual Platform and Virtual Laboratory Experiments -- Organization -- Relevance of Networking Tools -- Acknowledgement -- Contents -- Abbreviations -- Introduction to High-Speed Networks and Science DMZ -- 1 Objective and Access to Accompanied Training Material -- 2 Motivation for Science DMZs -- 3 Science DMZs Applications -- Chapter 1-Lab 1: Introduction to Mininet -- 4 Introduction to Mininet -- 5 Invoking Mininet Using the CLI -- 5.1 Invoking Mininet Using the Default Topology -- 5.2 Testing Connectivity -- 6 Building and Emulating a Network in Mininet Using the GUI -- 6.1 Building the Network Topology -- 6.2 Testing Connectivity -- 6.3 Automatic Assignment of IP Addresses -- 6.4 Saving and Loading a Mininet Topology -- Chapter 1-Lab 2: Introduction to iPerf3 -- Lab Roadmap -- 7 Introduction to iPerf3 -- 8 Lab Topology -- 8.1 Starting Host h1 and Host h2 -- 9 Using iPerf3 (Client and Server Commands) -- 9.1 Starting Client and Server -- 9.2 Setting Transmitting Time Period -- 9.3 Setting Time Interval -- 9.4 Changing the Number of Bytes to Transmit -- 9.5 Specifying the Transport-Layer Protocol -- 9.6 Changing Port Number -- 9.7 Export Results to JSON File -- 9.8 Handle One Client -- 10 Plotting iPerf3 Results -- References -- Network Cyberinfrastructure Aspects for Big Data Transfers -- 1 Limitations of Enterprise Networks and Motivation for Science DMZs -- 2 Science DMZ Architecture -- 2.1 Addressing the Enterprise Network Limitations -- 3 WAN Cyberinfrastructure -- 3.1

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