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Descrizione fisica	1 online resource (841 p.)
Disciplina	025.04
Soggetti	Real-time data processing Data flow computing Data mining
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Nota di contenuto	Cover; Chapter 1: Introduction to Streaming Data; Sources of Streaming Data; Why Streaming Data Is Different; Infrastructures and Algorithms; Conclusion; Part I: Streaming A Analytics Architecture; Chapter 2: Designing Real-Time Streaming Architectures; Real-Time Architecture Components; Features of a Real-Time Architecture; Languages for Real-Time Programming; A Real-Time Architecture Checklist; Conclusion; Chapter 3: Service Configuration and Coordination; Motivation for Configuration and Coordination Systems; Maintaining Distributed State; Apache ZooKeeper; Conclusion Chapter 4: Data-Flow Management in Streaming Analysis Distributed Data Flows; Apache Kafka: High-Throughput Distributed Messaging; Apache Flume: Distributed Log Collection; Conclusion; Chapter 5: Processing Streaming Data; Distributed Streaming Data Processing; Processing Data with Storm; Processing Data with Samza; Conclusion; Chapter 6: Storing Streaming Data; Consistent Hashing; "NoSQL" Storage Systems; Other Storage Technologies; Choosing a Technology; Warehousing; Conclusion; Part II: Analysis and Visualization; Chapter 7: Delivering Streaming Metrics; Streaming Web Applications Visualizing Data Mobile Streaming Applications; Conclusion; Chapter 8:

Exact Aggregation and Delivery; Timed Counting and Summation; Multi-Resolution Time-Series Aggregation; Stochastic Optimization; Delivering Time-Series Data; Conclusion; Chapter 9: Statistical Approximation of Streaming Data; Numerical Libraries; Probabilities and Distributions; Working with Distributions; Random Number Generation; Sampling Procedures; Conclusion; Chapter 10: Approximating Streaming Data with Sketching; Registers and Hash Functions; Working with Sets; The Bloom Filter; Distinct Value Sketches The Count-Min Sketch Other Applications; Conclusion; Chapter 11: Beyond Aggregation; Models for Real-Time Data; Forecasting with Models; Monitoring; Real-Time Optimization; Conclusion; Introduction; Overview and Organization of This Book; Who Should Read This Book; Tools You Will Need; What's on the Website; Time to Dive In; End User License Agreement

Sommario/riassunto

Construct a robust end-to-end solution for analyzing and visualizing streaming data Real-time analytics is the hottest topic in data analytics today. In Real-Time Analytics: Techniques to Analyze and Visualize Streaming Data, expert Byron Ellis teaches data analysts technologies to build an effective real-time analytics platform. This platform can then be used to make sense of the constantly changing data that is beginning to outpace traditional batch-based analysis platforms. The author is among a very few leading experts in the field. He has a prestigious background in research, development,
