Record Nr. UNINA9911008897003321 Autore Jeffery Travis Titolo Distributed services with Go: your guide to reliable, scalable, and maintainable systems / / Travis Jeffery [Raleigh, North Carolina]:,: The Pragmatic Programmers, LLC,, [2021] Pubbl/distr/stampa ©2021 **ISBN** 9781680508383 1680508385 9781680508390 1680508393 Edizione [First edition.] Descrizione fisica 1 online resource (245 pages) Disciplina 005.2762 Soggetti Go (Computer program language) Electronic data processing - Distributed processing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Part 1: Get started. 1. Let's go -- 2. Structure data with protocol buffers -- 3. Write a log package -- Part 2: Network. 4. Serve requests with gRPC -- 5. Secure your services -- 6. Observe your systems --Part 3: Distribute. 7. Server-to-server service discovery -- 8. Coordinate your services with consensus -- 9. Discover servers and load balance from the client -- Part 4: Deploy. 10. Deploy applications with Kubernetes locally -- 11. Deploy applications with Kubernetes to the cloud. Sommario/riassunto This is the book for Gophers who want to learn how to build distributed systems. You know the basics of Go and are eager to put your knowledge to work. Build distributed services that are highly available, resilient, and scalable. This book is just what you need to apply Go to real-world situations. Level up your engineering skills today. Take your Go skills to the next level by learning how to design, develop, and deploy a distributed service. Start from the bare essentials of storage handling, then work your way through networking a client and server, and finally to distributing server instances, deployment, and testing. All

this will make coding in your day job or side projects easier, faster, and

more fun. Create your own distributed services and contribute to open source projects. Build networked, secure clients and servers with gRPC. Gain insights into your systems and debug issues with observable services instrumented with metrics, logs, and traces. Operate your own Certificate Authority to authenticate internal web services with TLS. Automatically handle when nodes are added or removed to your cluster with service discovery. Coordinate distributed systems with replicated state machines powered by the Raft consensus algorithm. Lay out your applications and libraries to be modular and easy to maintain. Write CLIs to configure and run your applications. Run your distributed system locally and deploy to the cloud with Kubernetes. Test and benchmark your applications to ensure they're correct and fast. Dive into writing Go and join the hundreds of thousands who are using it to build software for the real world. What You Need: Go 1.13+ and Kubernetes 1.16+