Record Nr. UNINA9910963123103321 Autore Holmes Frederic Lawrence Titolo Meselson, Stahl, and the replication of DNA: a history of "the most beautiful experiment in biology" / / Frederic Lawrence Holmes New Haven, CT,: Yale University Press, 2001 Pubbl/distr/stampa **ISBN** 9786611730451 9781281730459 1281730459 9780300129663 0300129661 Edizione [1st ed.] Descrizione fisica 1 online resource (1 online resource (xii, 503 p.)): ill Disciplina 572.8/6 DNA replication - Experiments - History Soggetti Molecular biology - Experiments - History Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references (p. [449]-496) and index. Nota di bibliografia Nota di contenuto Machine generated contents note: Chapter One The Replication Problem 11 -- Chapter Two Meselson and Stahl 49 -- Chapter Three Twists and Turs 75 -- Chapter Four Crossing Fields: Chemical Bonds to Biological Mutants 116 -- Chapter Five Dense Solutions 157 -- Chapter Six The Big Machine 183 -- Chapter Seven Working at High Speed 215 -- Chapter Eight The Unseen Band 272 -- Chapter Nine One Discovery, Three Stories 303 -- Chapter Ten An Extremely Beautiful Experiment 319 -- Chapter Eleven Centrifugal Forces 352 -- Chapter Twelve The Subunits of Semiconservative Replication 388 -- Chapter Thirteen Images of an Experiment 412 -- Chapter Fourteen Afterword 435. Sommario/riassunto In 1957 two young scientists, Matthew Meselson and Frank Stahl, produced a landmark experiment confirming that DNA replicates as predicted by the double helix structure Watson and Crick had recently proposed. It also gained immediate renown as a "most beautiful" experiment whose beauty was tied to its simplicity. Yet the

investigative path that led to the experiment was anything but simple, Frederic L. Holmes shows in this masterful account of Meselson and Stahl's quest. This book vividly reconstructs the complex route that led

to the Meselson-Stahl experiment and provides an inside view of dayto-day scientific research--its unpredictability, excitement, intellectual
challenge, and serendipitous windfalls, as well as its frustrations,
unexpected diversions away from original plans, and chronic
uncertainty. Holmes uses research logs, experimental films,
correspondence, and interviews with the participants to record the
history of Meselson and Stahl's research, from their first thinking about
the problem through the publication of their dramatic results. Holmes
also reviews the scientific community's reception of the experiment, the
experiment's influence on later investigations, and the reasons for its
reputation as an exceptionally beautiful experiment.

Record Nr. UNINA9910910498103321

Autore Smirnov Evgenij

Titolo Building Modern Active Directory: Engineering, Building, and Running

Active Directory for the Next 25 Years / / by Evgenij Smirnov

Pubbl/distr/stampa Berkeley, CA:,: Apress:,: Imprint: Apress,, 2024

ISBN 9798868809415

9798868809408

Edizione [1st ed. 2024.]

Descrizione fisica 1 online resource (525 pages)

Disciplina 005.268

Soggetti Directory services (Computer network technology)

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Includes index.

Nota di contenuto Ch 1: Problems with AD -- Ch 2: Modern AD -- Ch 3: Engineering

Topology -- Ch 4: Engineering Lookup -- Ch 5. Engineering

Authentication -- Ch 6: Engineering Authorization -- Ch 7: Engineering Configuration -- Ch 8: Engineering Administration -- Ch 9: Building a Modern AD -- Ch 10: Operating a Modern AD -- Ch 11: Transitioning

to a Modern AD -- Ch 12: Conclusion.

Sommario/riassunto Break the vicious circle of designs perpetuating the errors of the past

and "just click next and accept the defaults" implementations

preventing a secure and reliable future. This book looks at the typical patterns and antipatterns in Active Directory (AD) design, deployment,

and operations and provides an approach to building and operating AD that is based on engineering (analyzing and fulfilling requirements) rather than design (formulating requirements). The book starts with an historical overview of AD and its future 25 years later. You then learn about the challenges that organizations running AD are facing today followed by understanding how to avoid them while learning modern requirements for more efficient and effective AD performance. After that, you go through business requirements influencing the AD topology along with ways to engineer information lookup to protect high-value objects. The book looks at two main protocols and the many dialects that AD offers to engineer an authentication service that fulfills modern requirements while leaving insecure legacy configurations behind. Managing AD from both the security and usability perspectives is discussed next in the book. Building, operating, and transitioning to a modern AD is demonstrated in detail. The book guides you with the next steps of your journey to achieve a secure and reliable AD. After reading this book, you will be able to bridge the gap between the two approaches by analyzing real-world business requirements, explaining the decision-making process in both design and engineering, and ultimately providing concrete engineering guidelines for typical implementation scenarios. What Will You Learn Build a modern Active Directory (AD), leaving behind design antipatterns that are not valid anymore Build a "secure by design" AD and accommodate legacy technology without compromising the overall security Understand advanced AD functionality such as controlling object visibility and partitioning Kerberos authentication by Authentication Policies Operate a modern AD, react to changing business requirements, and respond to ever-evolving security threats.