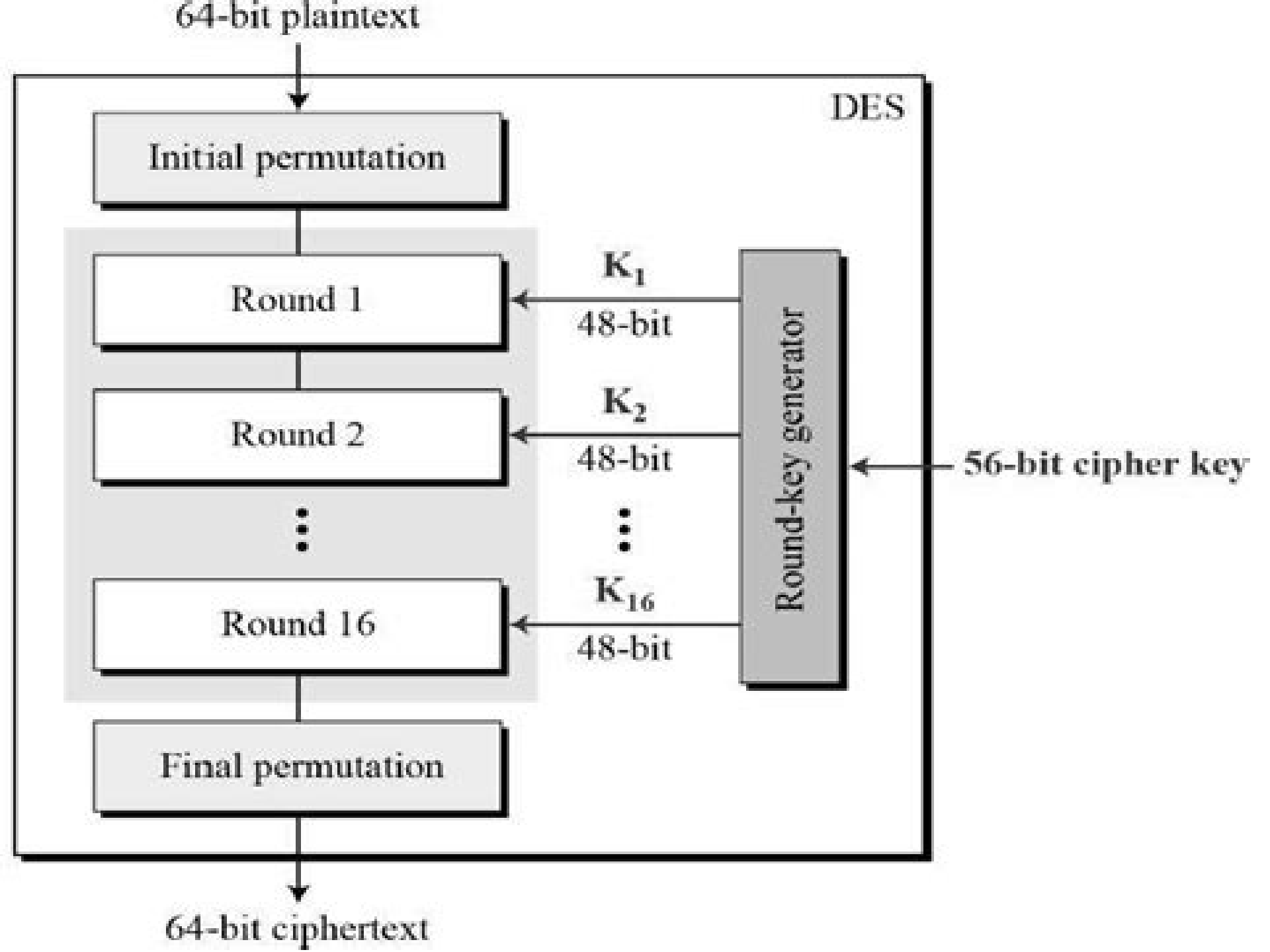
64-bit plaintext
DES
Initial permutation
Round 1
Round 2
Round 16
Final permutation
K_1
48-bit
K_2
48-bit
K_{16}
48-bit
Round-key generator
56-bit cipher key
64-bit ciphertext

The Standard Data Encryption Algorithm

AN Whitehead

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The Standard Data Encryption Algorithm Harry Katzan,1977 **Data Encryption Standard (DES)** ,1999 The selective application of technological and related procedural safeguards is an important responsibility of every Federal organization in providing adequate security to its electronic data systems This publication specifies two cryptographic algorithms the Data Encryption Algorithm DEA and the Triple Data Encryption Algorithm TDEA which may he used by Federal organizations to protect sensitive data Protection of data during transmission or while in storage may be necessary to maintain the confidentiality and integrity of the information represented by the data The algorithms uniquely define the mathematical steps required to transform data into a cryptographic cipher and also to transform the cipher back to the original form The Data Encryption Standard is being made available for use by Federal agencies within the context of a total security program consisting of physical security procedures good information management practices and computer system network access controls This revision supersedes FIPS 46 2 in its entirety **American National Standard** ,1981 *Data Encryption Standard* United States. National Bureau of Standards,1988 *Computer Security and the Data Encryption Standard* ,1978

American National Standard Data Encryption Algorithm American National Standards Institute,Computer and Business Equipment Manufacturers Association,1981 *Report of the Workshop on Estimation of Significant Advances in Computer Technology, Held at the National Bureau of Standards, August 30-31, 1976* Institute for Computer Sciences and Technology. Computer Systems Engineering Division,1976 **Algorithms—Advances in Research and Application: 2013 Edition** ,2013-06-21 Algorithms Advances in Research and Application 2013 Edition is a ScholarlyEditions book that delivers timely authoritative and comprehensive information about Coloring Algorithm The editors have built Algorithms Advances in Research and Application 2013 Edition on the vast information databases of ScholarlyNews You can expect the information about Coloring Algorithm in this book to be deeper than what you can access anywhere else as well as consistently reliable authoritative informed and relevant The content of Algorithms Advances in Research and Application 2013 Edition has been produced by the world s leading scientists engineers analysts research institutions and companies All of the content is from peer reviewed sources and all of it is written assembled and edited by the editors at ScholarlyEditions and available exclusively from us You now have a source you can cite with authority confidence and credibility More information is available at http www ScholarlyEditions com *Machine Learning Approach for Cloud Data Analytics in IoT* Sachi Nandan Mohanty,Jyotir Moy Chatterjee,Monika Mangla,Suneeta Satpathy,Sirisha Potluri,2021-07-14 Machine Learning Approach for Cloud Data Analytics in IoT The book covers the multidimensional perspective of machine learning through the perspective of cloud computing and Internet of Things ranging from fundamentals to advanced applications Sustainable computing paradigms like cloud and fog are capable of handling issues related to performance storage and processing maintenance security efficiency integration cost energy and latency in an expeditious manner In order to expedite decision making

involved in the complex computation and processing of collected data IoT devices are connected to the cloud or fog environment Since machine learning as a service provides the best support in business intelligence organizations have been making significant investments in this technology Machine Learning Approach for Cloud Data Analytics in IoT elucidates some of the best practices and their respective outcomes in cloud and fog computing environments It focuses on all the various research issues related to big data storage and analysis large scale data processing knowledge discovery and knowledge management computational intelligence data security and privacy data representation and visualization and data analytics The featured technologies presented in the book optimizes various industry processes using business intelligence in engineering and technology Light is also shed on cloud based embedded software development practices to integrate complex machines so as to increase productivity and reduce operational costs The various practices of data science and analytics which are used in all sectors to understand big data and analyze massive data patterns are also detailed in the book

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