Telematik

Tadeus Uhl

Voice over IP (VoIP) Technology

SHAKER
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Reviewers:

Prof. Dr.-Ing. Holger Dahms
Lübeck University of Applied Sciences/Germany

Prof. Dr. Wolfgang Riggert
Flensburg University of Applied Sciences/Germany

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Foreword

This book deals with the subject of “Voice over IP” (VoIP), which is an important aspect of today’s communication technology. It provides the reader with an overview of this new network technology. First of all, the basic architectures of such solutions are introduced. The components of these architectures are precisely described in consideration of the aspects that are important to readers when it comes to gaining practical experience. Afterwards, the most important protocols for this new transmission technology will be discussed in detail. Its functionalities will be clarified in many flowcharts. Another part of this book provides information about audio and video source coding. Several chapters of this book consider the issue of “quality of service” (QoS). Therefore the most important QoS parameters are defined and discussed from a practical point of view. The current mechanisms to support the quality of service in networks will be addressed as well. Another chapter gives several invaluable pieces of information about determining and monitoring QoS in networks. This chapter is highly recommended for professionals. In the convergence of networks the coupling elements have an important function. The gateways are of particular importance. This issue is also discussed from a practical point of view. The last part of this book deals with planning, commissioning and maintenance of VoIP systems. A distinction is made between soft and hard migration to VoIP. The necessary steps are discussed, and shown in detail. The next to last chapter has a scientific character; it deals with the quantifying of QoS in VoIP. The last chapter is dedicated to the important today topic "VoIP Security".

This book is part of an extensive series of documents about the subject of VoIP. It was created as a medium for teaching at vocational schools, institutes of continuing training and all manner of universities as well as companies that recruit trainees. After understanding the basics of VoIP network technology described in this book, the practical work with this technology can be learned with the aid of special units which contain exercises.

Prof. Dr.-Ing. habil. Tadeus Uhl
Maritime University of Szczecin/Poland
Flensburg University of Applied Sciences/Germany

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