

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910830935403321 |
| Autore | Burbank Jack |
| Titolo | An introduction to network modeling and simulation for the practicing engineer // Jack Burbank, William Kasch, Jon Ward |
| Pubbl/distr/stampa | Picataway : , : IEEE Press, , c2011 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2011] |
| ISBN | 1-283-23977-9 9786613239778 1-118-06364-3 1-118-06363-5 |
| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (217 p.) |
| Collana | The comsoc guides to communications technologies ; ; 5 |
| Altri autori (Persone) | WardJon KaschWilliam |
| Disciplina | 620.00113 620.0042 |
| Soggetti | Communication and technology Simulation methods |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Modeling and Simulation for RF Propagation -- Physical Layer Modeling and Simulation -- Medium Access Control Modeling and Simulation -- Modeling and Simulation for Higher Layer Protocols -- Hardware-in-the-Loop Simulations -- Complete Network Modeling and Simulation -- Other Vital Aspects of Successful Network Modeling and Simulation -- Network Modeling and Simulation: Summary. |
| Sommario/riassunto | Clear guidelines and rules for using the latest modeling and simulation toolsWith this practical guide as a reference, engineers and students can select and take full advantage of the best tools for network modeling and simulation (M&S). It alerts readers to all the potential pitfalls that can occur in developing and implementing network M&S, offering a clear set of rules to streamline the entire process and ensure the validity of results. The book focuses on wireless network M&S; however, the authors' expert advice, based on their own firsthand experience and review of the current literature, is applicable to network M&S in general.An Introduction to Network Modeling and Simulation for |

the Practicing Engineer begins with a brief summary of the advantages and disadvantages of M&S as well as an overview of common M&S tools. Next, it explores the core components of wireless network M&S: Radio frequency propagation M&S. Physical layer M&S. Medium access control M&S. Higher layer M&S. After discussing each of these components, the authors explain how they can be integrated in order to perform M&S of a complete wireless networking system. Throughout the book, examples guide readers through each M&S task, with descriptive diagrams providing additional clarification. In many cases, M&S is the only viable way to understand the behavior of a proposed network prior to its deployment. Working with An Introduction to Network Modeling and Simulation for the Practicing Engineer, readers can ensure that their models and simulations are as accurate a reflection of reality as possible.
