



Optical Network Design and Planning (Optical Networks)

By Jane M. Simmons

Download now

Read Online 

Optical Network Design and Planning (Optical Networks) By Jane M. Simmons

This book takes a pragmatic approach to deploying state-of-the-art optical networking, while also covering recent research results. Algorithms and methodologies related to routing, regeneration, wavelength assignment, sub-rate traffic grooming, and protection are presented, with an emphasis on optical-bypass-enabled (or all-optical) networks. The second edition includes coverage of:

- Dynamic optical networking
- Multi-domain networks
- Flex-grid, gridless, and elastic optical networks
- New physical-layer technology (e.g., coherent detection) and its impact on network design
- ROADM architectures and features, including the colorless, directionless, contentionless and gridless properties
- Algorithms for cloud computing
- Software-Defined Networking
- Energy efficiency

Numerous case studies are presented using three reference networks (the topology files for the networks are provided on a web site, for further studies by the reader). Exercises and suggestions for further research have been added in the second edition, making the book suitable as the primary text for a graduate-level course.

 [Download Optical Network Design and Planning \(Optical Netwo ...pdf](#)

 [Read Online Optical Network Design and Planning \(Optical Net ...pdf](#)

Optical Network Design and Planning (Optical Networks)

By Jane M. Simmons

Optical Network Design and Planning (Optical Networks) By Jane M. Simmons

This book takes a pragmatic approach to deploying state-of-the-art optical networking, while also covering recent research results. Algorithms and methodologies related to routing, regeneration, wavelength assignment, sub-rate traffic grooming, and protection are presented, with an emphasis on optical-bypass-enabled (or all-optical) networks. The second edition includes coverage of:

- Dynamic optical networking
- Multi-domain networks
- Flex-grid, gridless, and elastic optical networks
- New physical-layer technology (e.g., coherent detection) and its impact on network design
- ROADM architectures and features, including the colorless, directionless, contentionless and gridless properties
- Algorithms for cloud computing
- Software-Defined Networking
- Energy efficiency

Numerous case studies are presented using three reference networks (the topology files for the networks are provided on a web site, for further studies by the reader). Exercises and suggestions for further research have been added in the second edition, making the book suitable as the primary text for a graduate-level course.

Optical Network Design and Planning (Optical Networks) By Jane M. Simmons Bibliography

- Sales Rank: #1626580 in Books
- Published on: 2014-05-07
- Original language: English
- Number of items: 1
- Dimensions: 9.20" h x 1.30" w x 6.30" l, .0 pounds
- Binding: Hardcover
- 516 pages

 [Download Optical Network Design and Planning \(Optical Netwo ...pdf](#)

 [Read Online Optical Network Design and Planning \(Optical Net ...pdf](#)

Download and Read Free Online Optical Network Design and Planning (Optical Networks) By Jane M. Simmons

Editorial Review

Review

From the reviews: "This is ... nicely written tutorial book devoted to optical networking. ... I recommend it to specialists working in companies planning to switch to full optical networks.... Also, graduate students will benefit from using it..." (Piotr Cholda, ACM Computing Reviews, April, 2009)

Review

"This is my favorite book on optical network design and planning. It is written in an easy-to-follow approach that starts with basics such as optical network elements, routing, regeneration, wavelength assignment, grooming and ramps up to take on advanced and timely bundle of technology such as shared mesh protection, flexible optical network, and dynamic optical network with emphasis on software – defined networking." (Mazen Khaddam, Principal Lead Strategic Network Scientist & Architect, Cox Communications)

From the Back Cover

This book takes a pragmatic approach to designing state-of-the-art optical networks for backbone, regional, and metro-core networks. Algorithms and methodologies related to routing, regeneration, wavelength assignment, subrate-traffic grooming, and protection are presented, with an emphasis on optical-bypass-enabled (or all-optical) networks. There are numerous case studies throughout the text to illustrate the concepts, using realistic networks and traffic sets. A full chapter of economic studies offers guidelines as to when and how optical-bypass technology should be deployed. There is also extensive coverage of recent research to provide insight into how optical networks are likely to evolve.

The second edition includes new chapters on dynamic optical networking and flexible/elastic optical networks. There is expanded coverage of new physical-layer technology and its impact on network design, along with enhanced coverage of ROADM architectures, including the colorless, directionless, contentionless, and gridless properties. It covers other hot topics such as software defined networking, energy efficiency, and multi-domain networks, as well as new architectural paradigms and algorithmic techniques. Numerous exercises have been added to probe the concepts in more detail and inspire directions for future research.

Users Review

From reader reviews:

Frank Huynh:

The experience that you get from Optical Network Design and Planning (Optical Networks) is a more deep you excavating the information that hide inside words the more you get serious about reading it. It doesn't mean that this book is hard to comprehend but Optical Network Design and Planning (Optical Networks) giving you thrill feeling of reading. The writer conveys their point in certain way that can be understood through anyone who read the item because the author of this reserve is well-known enough. This specific

book also makes your own vocabulary increase well. Therefore it is easy to understand then can go with you, both in printed or e-book style are available. We highly recommend you for having this specific Optical Network Design and Planning (Optical Networks) instantly.

Jessica Kelly:

Playing with family in the park, coming to see the marine world or hanging out with close friends is thing that usually you might have done when you have spare time, after that why you don't try thing that really opposite from that. 1 activity that make you not sense tired but still relaxing, trilling like on roller coaster you are ride on and with addition associated with. Even you love Optical Network Design and Planning (Optical Networks), it is possible to enjoy both. It is great combination right, you still want to miss it? What kind of hangout type is it? Oh come on its mind hangout people. What? Still don't get it, oh come on its known as reading friends.

Gertrude Hoskins:

Beside this kind of Optical Network Design and Planning (Optical Networks) in your phone, it can give you a way to get nearer to the new knowledge or details. The information and the knowledge you might got here is fresh through the oven so don't always be worry if you feel like an older people live in narrow commune. It is good thing to have Optical Network Design and Planning (Optical Networks) because this book offers to you readable information. Do you oftentimes have book but you would not get what it's all about. Oh come on, that wil happen if you have this in the hand. The Enjoyable arrangement here cannot be questionable, like treasuring beautiful island. Techniques you still want to miss that? Find this book and read it from currently!

Herbert Oakley:

As we know that book is vital thing to add our understanding for everything. By a e-book we can know everything we really wish for. A book is a pair of written, printed, illustrated or perhaps blank sheet. Every year has been exactly added. This book Optical Network Design and Planning (Optical Networks) was filled regarding science. Spend your spare time to add your knowledge about your scientific research competence. Some people has different feel when they reading some sort of book. If you know how big benefit from a book, you can experience enjoy to read a guide. In the modern era like at this point, many ways to get book that you wanted.

Download and Read Online Optical Network Design and Planning (Optical Networks) By Jane M. Simmons #DTMJGXZ14LF

Read Optical Network Design and Planning (Optical Networks) By Jane M. Simmons for online ebook

Optical Network Design and Planning (Optical Networks) By Jane M. Simmons Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Optical Network Design and Planning (Optical Networks) By Jane M. Simmons books to read online.

Online Optical Network Design and Planning (Optical Networks) By Jane M. Simmons ebook PDF download

Optical Network Design and Planning (Optical Networks) By Jane M. Simmons Doc

Optical Network Design and Planning (Optical Networks) By Jane M. Simmons Mobipocket

Optical Network Design and Planning (Optical Networks) By Jane M. Simmons EPub

DTMJGXZ14LF: Optical Network Design and Planning (Optical Networks) By Jane M. Simmons