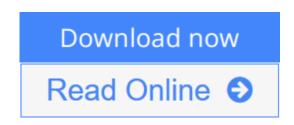# Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology)

By Vinit Jain, Brad Edgeworth

Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth

The definitive guide to troubleshooting today's complex BGP networks

This is today's best single source for the techniques you need to troubleshoot BGP issues in modern Cisco IOS, IOS XR, and NxOS environments. BGP has expanded from being an Internet routing protocol and provides a scalable control plane for a variety of technologies, including MPLS VPNs and VXLAN. Bringing together content previously spread across multiple sources, *Troubleshooting BGP* describes BGP functions in today's blended service provider and enterprise environments.

Two expert authors emphasize the BGP-related issues you're most likely to encounter in real-world deployments, including problems that have caused massive network outages. They fully address convergence and scalability, as well as common concerns such as BGP slow peer, RT constraint filtering, and missing BGP routes. For each issue, key concepts are presented, along with basic configuration, detailed troubleshooting methods, and clear illustrations. Wherever appropriate, OS-specific behaviors are described and analyzed.

Troubleshooting BGP is an indispensable technical resource for all consultants, system/support engineers, and operations professionals working with BGP in even the largest, most complex environments.

· Quickly review the BGP protocol, configuration, and commonly used features
· Master generic troubleshooting methodologies that are relevant to BGP networks
· Troubleshoot BGP peering issues, flapping peers, and dynamic BGP peering
· Resolve issues related to BGP route installation, path selection, or route policies

- · Avoid and fix convergence problems
- · Address platform issues such as high CPU or memory usage
- · Scale BGP using route reflectors, diverse paths, and other advanced features
- · Solve problems with BGP edge architectures, multihoming, and load balancing
- · Secure BGP inter-domain routing with RPKI
- · Mitigate DDoS attacks with RTBH and BGP Flowspec
- · Understand common BGP problems with MPLS Layer 3 or Layer 2 VPN services
- · Troubleshoot IPv6 BGP for service providers, including 6PE and 6VPE
- · Overcome problems with VXLAN BGP EVPN data center deployments
- · Fully leverage BGP High Availability features, including GR, NSR, and BFD
- · Use new BGP enhancements for link-state distribution or tunnel setup

This book is part of the **Networking Technology Series** from Cisco Press, which offers networking professionals valuable information for constructing efficient networks, understanding new technologies, and building successful careers.

Download Troubleshooting BGP: A Practical Guide to Understa ...pdf

Read Online Troubleshooting BGP: A Practical Guide to Unders ...pdf

Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology)

By Vinit Jain, Brad Edgeworth

Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth

The definitive guide to troubleshooting today's complex BGP networks

This is today's best single source for the techniques you need to troubleshoot BGP issues in modern Cisco IOS, IOS XR, and NxOS environments. BGP has expanded from being an Internet routing protocol and provides a scalable control plane for a variety of technologies, including MPLS VPNs and VXLAN. Bringing together content previously spread across multiple sources, *Troubleshooting BGP* describes BGP functions in today's blended service provider and enterprise environments.

Two expert authors emphasize the BGP-related issues you're most likely to encounter in real-world deployments, including problems that have caused massive network outages. They fully address convergence and scalability, as well as common concerns such as BGP slow peer, RT constraint filtering, and missing BGP routes. For each issue, key concepts are presented, along with basic configuration, detailed troubleshooting methods, and clear illustrations. Wherever appropriate, OS-specific behaviors are described and analyzed.

Troubleshooting BGP is an indispensable technical resource for all consultants, system/support engineers, and operations professionals working with BGP in even the largest, most complex environments.

· Quickly review the BGP protocol, configuration, and commonly used features
· Master generic troubleshooting methodologies that are relevant to BGP networks
· Troubleshoot BGP peering issues, flapping peers, and dynamic BGP peering
· Resolve issues related to BGP route installation, path selection, or route policies
· Avoid and fix convergence problems
· Address platform issues such as high CPU or memory usage
· Scale BGP using route reflectors, diverse paths, and other advanced features
· Solve problems with BGP edge architectures, multihoming, and load balancing
· Secure BGP inter-domain routing with RPKI
· Mitigate DDoS attacks with RTBH and BGP Flowspec
· Understand common BGP problems with MPLS Layer 3 or Layer 2 VPN services
· Troubleshoot IPv6 BGP for service providers, including 6PE and 6VPE
· Overcome problems with VXLAN BGP EVPN data center deployments
· Fully leverage BGP High Availability features, including GR, NSR, and BFD
· Use new BGP enhancements for link-state distribution or tunnel setup

This book is part of the **Networking Technology Series** from Cisco Press, which offers networking professionals valuable information for constructing efficient networks, understanding new technologies, and building successful careers.

Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth Bibliography

- Rank: #515789 in Books
- Brand: Cisco Press
- Published on: 2016-12-30
- Original language: English
- Number of items: 1
- Dimensions: 9.00" h x 2.00" w x 7.40" l, .0 pounds
- Binding: Paperback
- 832 pages

⬇ **Download** Troubleshooting BGP: A Practical Guide to Understa ...pdf

📄 **Read Online** Troubleshooting BGP: A Practical Guide to Unders ...pdf

Download and Read Free Online Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth

Editorial Review

About the Author
Vinit Jain, 4X CCIE #22854 is a Technical Lead in HTTS (High Touch Technical Services) team supporting customers in areas of routing, MPLS, TE, IPv6, multicast issues on IOS, IOS XE, IOS XR and NxOS code base. Vinit has been delivering trainings within Cisco on various technology as well as platform troubleshooting topics. He is also a speaker at Cisco Live on Troubleshooting BGP. Vinit is also one of the top Contributors on Cisco Support Community and is also a regular speaker delivering webcasts on various topics. Vinit has expertise in troubleshooting Service Provider, Enterprise and Data Center environments and holds multiple certifications on programming and databases along with CCIE.

Users Review

From reader reviews:

Lillie Levine:

Book is definitely written, printed, or descriptive for everything. You can understand everything you want by a e-book. Book has a different type. As you may know that book is important thing to bring us around the world. Adjacent to that you can your reading talent was fluently. A book Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) will make you to possibly be smarter. You can feel more confidence if you can know about anything. But some of you think which open or reading a new book make you bored. It is not necessarily make you fun. Why they might be thought like that? Have you looking for best book or ideal book with you?

Gerald Conway:

As people who live in often the modest era should be update about what going on or details even knowledge to make all of them keep up with the era and that is always change and progress. Some of you maybe may update themselves by examining books. It is a good choice in your case but the problems coming to an individual is you don't know which one you should start with. This Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) is our recommendation to make you keep up with the world. Why, because book serves what you want and want in this era.

Justin Pritchett:

Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) can be one of your beginner books that are good idea. Most of us recommend that straight away because this publication has good vocabulary that will increase your knowledge in words, easy to understand, bit entertaining but nevertheless delivering the information. The article writer giving his/her effort that will put every word into enjoyment arrangement in writing Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) however doesn't forget the main stage, giving the reader the hottest along with based confirm resource data that maybe you can be

considered one of it. This great information can easily drawn you into new stage of crucial thinking.

Brenda Hedstrom:

Do you like reading a reserve? Confuse to looking for your favorite book? Or your book seemed to be rare? Why so many problem for the book? But just about any people feel that they enjoy with regard to reading. Some people likes looking at, not only science book and also novel and Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) or perhaps others sources were given expertise for you. After you know how the good a book, you feel need to read more and more. Science book was created for teacher as well as students especially. Those ebooks are helping them to include their knowledge. In additional case, beside science book, any other book likes Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) to make your spare time considerably more colorful. Many types of book like here.

Download and Read Online Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth #Q6NTBXJGILS

Read Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth for online ebook

Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth 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 Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth books to read online.

Online Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth ebook PDF download

Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth Doc

Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth Mobipocket

Troubleshooting BGP: A Practical Guide to Understanding and Troubleshooting BGP (Networking Technology) By Vinit Jain, Brad Edgeworth EPub