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<<TCP/IP 路由技术>>

图书基本信息

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内容概要

本书深入系统地阐述了TCP/IP路由技术，内容包括几种重要的网络协议，如外部网关协议（EGP）、边界网关协议（BGP4），以及相应的高级IP路由技术与应用——网络地址转换、IP组播路由技术、IPv6技术、路由器管理等。

本书共分9章，首先介绍并讨论了有关主题的基本原理，接着是设计用来展示实际网络环境中相关概念的一系列配置范例，最后提供给读者经实践验证过的故障排除方法以解决网络可能会出现的问题。重点介绍了自治系统之间的路由选择策略以及诸如组播和IPv6等更具挑战性的路由选择和实施技术。

本书内容全面，可读性强，含有协议配置、网络实施、故障排除等方面的大量实例，是备战CCIE认证考试的经典之作，适合准备参加CCIE考试的人员、网络与通信系统工程技术人员阅读。

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作者简介

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章节摘录

Of course, in real life, few corporations the size of the one depicted in Figure 2-9 have theluxury of being designed "from the ground up" in such a c ordinated, logical fashion.Many, if not most, large internetworks have evolved from smaller internetworks that havebeen merged as divisions and corporations have merged. The result is that different networkadministrators have made different design choices for the various parts of the internetwork;when the parts are merged, the first order of business is basic interoperability.The second order of business might be the enforcement of routing policies. Some trafficfrom some domains of the internetwork to other domains may be required to always prefercertain links or routes, for example, or perhaps only certain routes should be advertisedbetween domains. In most cases, the necessary policies can still be implemented withredistribution between IGPs and tools such as route filters and route maps. You shouldimplement BGP only when a sound engineering reason compels you to do so, such as whenthe IGPs do not provide the tools necessary to implement the required routing policies orwhen the size of the routing tables cannot be controlled with summarization. BGP provesuseful, for instance, when many different IGPs are used in the domains. Here, BGP mightbe simpler to implement than attempting to redistribute among all the IGPs.When considering whether BGP is necessary in an intemetwork design, keep in mind whyexterior routing protocols were invented in the first place. Exterior routing protocols areused to route between autonomous systems——that is, between internetwork domains underdifferent administrative authorities. In a single corporate intemetwork, even a large onewith different domains under different local administrations, there is usually enough of acentralized authority to impose routing policy using the tools available with interior routingprotocols. When separate autonomous systems must interconnect, however, BGP might becalled for.

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编辑推荐

《TCP/IP 路由技术 (第2卷)(英文版)(精)》都将帮助您理解各种基本概念，并应用各种最佳实践技巧来应对网络的日益增长和有效管理等问题。
掌握BGP一4（事实上的域间路由协议标准）的操作、配置及故障检测与排除：理解NAT的操作、配置及故障检测与排除：通过一系列案例研究及练习题来理解IP多播路由的部署、配置及故障检测与排除：熟悉IPv6（下一代IP协议）的设计目标以及当前的发展状态：通过大量经专家验证的方法来管理路由器：通过大量实用且全面的复习题、配置练习题及故障检测与排除练习题来测试和验证各种所学知识：在掌握高级TCP／IP路由技术的同时，还可以进一步加强CCJE的认证准备工作。

为了管理日益增大的互连网络，需要全面理解路由器的操作行为。
理解外部网关协议的各种复杂运行机制。
包括TCP连接、消息状态、路径属性、内部路由协议互操作，以及建立邻居连接等内容。
《TCP/IP 路由技术 (第2卷)(英文版)(精)》为读者全面理解BGP-4（边界网关协议版本4）、多播路由、NAT（网络地址转换）、IPv6，以及有效管理路由器等提供了各种翔实的专业知识。
JeffDoyle丰富的实践经验，易于阅读的写作风格及内容全面的论述，使得《TCP/IP 路由技术 (第2卷)(英文版)(精)》成为所有网络专家的案头宝典。

《TCP/IP 路由技术 (第2卷)(英文版)(精)》大大扩展了第一卷的主题内容：网络增长所带来的可扩展性和管理性要求。
第二卷从第一卷的内部网关协议扩展到了自治系统间的路由协议，以及包括多播和IPv6在内的许多特殊路由问题。
并且沿用了在第一卷中所采取的有效的信息组织结构，即在讨论完主题基础知识之后。
辅之以一系列能充分展现现实网络世界中各种概念的配置案例。
并通过各种经过验证的故障检测与排除方法来解决网络中可能出现的各种问题。
《TCP/IP 路由技术 (第2卷)(英文版)(精)》不但可以帮助广大读者在自己的名字之后获得极具价值的CCIE号。
而且还能帮助大家掌握现实网络中所需的大量专家级网络知识和技巧。
无论您是在准备CCIE认证考试，还是在准备CCIE再认证考试，或是在寻求有关高级路由问题的专家建议。

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