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Note generali	"Get up to speed on the future of the internet with a fast, practical reference to IPv6"--Cover. Includes index.
Nota di contenuto	""Contents at a Glance""; ""Contents""; ""Foreword""; ""About the Author""; ""About the Technical Reviewers""; ""Acknowledgments""; ""Introduction""; ""Chapter 1: IPv6 the Big Picture""; ""IPv6 Now""; ""Market Drivers""; ""Depletion of Address Space""; ""Support in Major Operating Systems""; ""Rise of Cloud-Based Computing""; ""Ubiquity of Mobile Computing""; ""Access to Reference Materials""; ""Business Drivers""; ""Service Providers""; ""Why Is IPv6 Important to Microsoft""; ""Chapter 2: IPv6 Support in Windows""; ""Microsoft IPv6 History""; ""The Early Days"" ""Windows XP and Windows 2000 Server""""Current IPv6 Networking Stack Implementation""; ""Features and Functions of the Stack""; ""Mobile IPv6""; ""RFC 6106-IPv6 Router Advertisement Options for DNS Configuration""; ""DS-Lite""; ""6in4""; ""6rd""; ""SEND""; ""Tools Available to Manage IPv6 in Windows""; ""Tools Available to Migrate to IPv6 in

Windows"; "Transition Technologies"; "6to4 Transition Technology";
"ISATAP Transition Technology"; "Teredo Transition Technology";
"Microsoft's Long-Term Goals with IPv6"; "Some Final IPv6 Support
Thoughts"; "Chapter 3: IPv6 Addressing"
"IPv6 Address Basics" "Address Format"; "Size of the Address
Space"; "IPv6 Address Structure"; "Packet and Header
Configuration"; "IPv6 Address Representation"; "Defining Common
IPv6 Terminology"; "Types of IPv6 Addresses"; "Unicast"; "Global
Unicast Addresses"; "Unique Local Addresses"; "Link-Local
Addresses"; "Special Unicast Addresses"; "Unicast Transition
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Technology"; "Teredo Transition Technology"; "Multicast
Addresses"; "Multicast Address Structure"; "Managing Multicast"
"Neighbor Discovery a Solicited-Node" "Inverse Neighbor
Discovery"; "IPv6 Multicast and Ethernet"; "Anycast Addresses";
"ICMPv6 Protocol"; "Assigning IPv6 Addresses"; "Autoassigning
Addresses"; "Interface IDs"; "EUI-64 Interface ID"; "Random IDs
(Non-EUI-64)"; "SLAAC"; "Temporary IPv6 Addresses"; "DHCPv6";
"DHCPv6 Stateful"; "DHCPv6 Stateless"; "Assigning Both SLAAC and
DHCPv6"; "Manually Assigning IPv6 Addresses"; "Windows OS
Address Behavior"; "How Windows Determines to Use IPv6 or IPv4";
"Default Address Selection Behavior of IPv6"
"Default Address Selection Process" "RFC 6724 Summary"; "IPv6
Address Planning and Design"; "Size of Prefix and Subnetting";
"Nibble Boundaries"; "Routing"; "Router Advertisements"; "Router
Solicitations"; "Additional IPv6 Addressing Resources"; "Chapter 4:
IPv6 Best Practices for Windows"; "Microsoft Best Practice Resources";
"IPv6 Best Practices for Windows"; "IPv6 Best Practices Overview";
"IPv6 Transition Technologies"; "6to4"; "ISATAP"; "Teredo"; "IPv6
Transition Technologies Key Takeaways"; "Internet"; "Impact of IPv6"
"IPv6 Internet Key Takeaways"

Sommario/riassunto

Practical IPv6 for Windows Administrators is a handy guide to implementing IPv6 in a Microsoft Windows environment. This is the book you need if you are a Microsoft Windows Administrator confronted with IPv6 and in need of a quick resource to get up and going. The book covers the current state of IPv6 and its support in Microsoft Windows. It provides best-practices and other guidance toward successful implementation. This book is especially written with the goal of translating your current expertise in IPv4 into the new realm of IPv6. Special attention is given to dual-stack configurations, helping you to run IPv4 and IPv6 side-by-side and support both protocol versions during a transition period. Practical IPv6 for Windows Administrators is also a fast reference you can look at to get something done quickly. It covers IPv6 addressing, management of IPv6 from Powershell, Advanced Firewall configuration, and use of IPv6 in Hyper-V and virtual networking environments. You'll find practical examples showing how IPv6 integrates with all the standard tools you use for IPv4 today, tools like DNS and DHCP. You'll also find insider knowledge on IPv6 that can help avert stumbling points on the road to deployment. Provides a quick path from IPv4 expertise to IPv6 implementation Gives best-practices specific to Windows on IPv6 and dual stack networks Is chock full of practical examples showing how to manage IPv6 on Windows.
