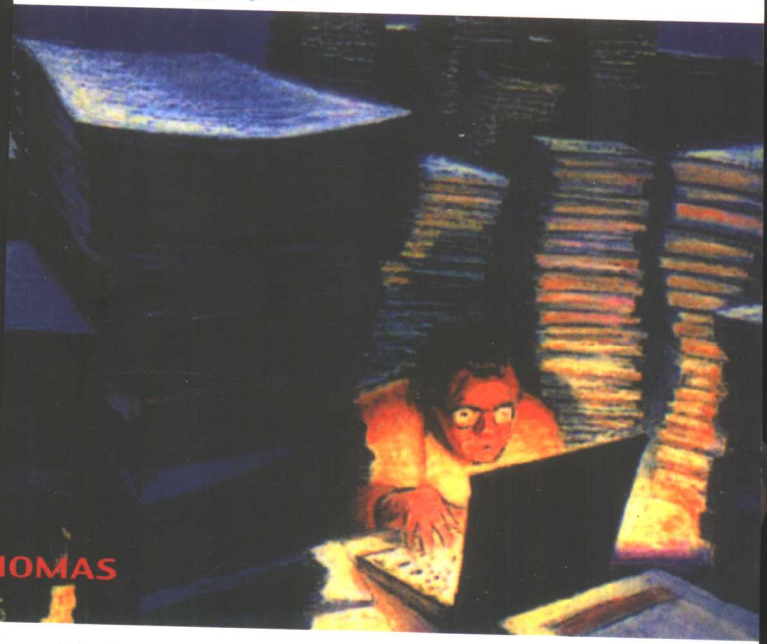
NT HANDS-ON

Windows NT 4.0 Registry:

A Professional Reference

Windows NT 4.0 注册表

- Complete BackOffice Reference
- FrontPage
- SQL Server
- Microsoft Exchange
- IIS
- SMS
- Proxy Server
- SNA Server



STEVEN B. THOMAS

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Windows NT 4.0 Registry

A Professional Reference

Steven Thomas

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ACKNOWLEDGMENTS

First of all, I would like to thank the editors at McGraw-Hill. In particular, I would like to thank my editors Michael Sprague and Judy Brief. Judy had the foresight to shape what is hopefully an invaluable reference. Michael endured a tremendous amount of unnecessary stress in the making of this book. His patience and perseverance helped me through a tough time. I have not forgotten that I owe you big, Michael.

While on the subject I would like to thank McGraw-Hill for letting me do this book my way. I would like to thank them for letting me give these people what they want so they do not have to continue searching all over creation trying to find a particular Registry entry. This will be unique compared to other books on the specialized topic in that my associates and I offer a compendium of entries to serve as a stable reference. If you are like me, you probably have spent a significant amount of money on technical documentation only to find that you are weeding through redundant information that ranges from conjecture to paraphrased help documentation—information that makes, at best, minimal contributions to the literature.

I would also like to express my respect to McGraw-Hill for not jumping the gun trying to get me to do an NT 5.0 book based on mere alphas and early betas of NT. They had the wisdom to resist putting the goal of speed in delivery over quality, the plight of many books that have covered NT 4.0.

I cannot and will not take complete credit for this publication. This book is a compilation of references and my insight on the product through my professional experience. I get information in the same manner as other people: through contacts, the Internet, tip trading, and hours upon hours of research, I have compiled this reference for you.

I cannot begin to thank all of my former students. With the teaching and learning involving them, I feel as if I have developed an ongoing think tank of information access. I have always tried to put myself in the student's place. In many ways I *am* in the student's place: I know what it is like to spend a couple of thousand dollars for a two- or three-day class that does not amount to anything for me. I know that the students need information that is not provided for them through the product documentation. Too often, the external resources do not offer anything more than a different way of presenting stuff already available. I try to avoid this and I hope I have achieved this with my book.

In addition to all my students I would like to show my appreciation to all of my fellow trainers and consultants. Although I am still young

in comparison to many of my peers, I am ahead of where I should be because of their wisdom and their willingness to share it with me. My first big influence in this industry was Bill Walters, and he still is there for me to this day. He has helped me through really tough situations. One of these days, I will make the time to join him and his wife Vicki at the Friday night technical vent session. This goes for the other participants in this support group: Carolyn Hill, Dr. Todd Lee, Steve Wicker, and Steve Pearsall. (It gets really confusing with three Steves at the same table in a bar.)

I would like to thank John Buckelew, who is a Microsoft Certified Trainer from Alabama. John and I met a year and a half ago at a class in Houston. John has helped me balance my teaching to where I do not come across like a propeller-head babbling instead of teaching while in class. John also likes my jokes, which also makes him worth mentioning in this section. He is a peer that I hope to know for the rest of my life. He is a true friend because he will tell me what I need to be told rather than what I want to hear. I wish him, his wife, and his newborn all the best.

Teresa Bisallion was gracious enough to provide me with information on the TCP/IP Registry entries. She, like John, is someone I appreciate knowing professionally and personally. I wish her and Brad at Werner the best of luck in their future.

The American Research Group has continued to be a source for many of my consulting and training contracts. I thank them for providing something good to the industry: training that is relevant, practical, and worthwhile to companies. Most of my peer groups of trainers stay with them because of this. I would like to thank my product line contact at ARG, Patrick von Schalgg, for keeping those gigs coming.

Speaking of ARG, thanks goes to the management, including Greg Roels, Scott Kingsley, Dave Mantica, and several others who worked with me during my periods of high maintenance. I am never really sure what Dave's position is because he is always getting promoted.

I would like to thank my staff at Gate City Consulting. Andy Rogers and Shannon Kelly are responsible for this book taking a shape that could be presented to a publishing company. I hope I have created something that will make a difference in this industry, and it would not have been possible without their help.

A very large thanks goes to all the NT users, developers, and network administrators who painstakingly continue to discover new items and tidbits about the Registry.

I must also thank a current mentor who is there for me in all capacities. He is a teacher's teacher, an intellectual by definition, a Renaissance man—

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David Nance. If anybody reading this book ever has a chance to take a class taught by Dave or read a publication by Dave, take that chance—you will be enlightened.

At the time I am writing this, my wife is going into her sixth month of pregnancy. I miss her tremendously when I am on the road. In fact, I am going through an ethical crisis: I am not sure if I want to maintain my amount of time on the road now that I have a child on the way. Either way I choose, my wife will always be there for me. I love her for that. I am so glad I committed my life to her.

INTRODUCTION

For three years I have been attempting to complete this book. It all started with my introduction to Windows NT. It was Robert Skoglund who first introduced me to the uses of Windows NT as well as the career potential in training and consulting NT. He is a brilliant consultant who lives in Florida along with the other two-thirds of the consultants and trainers of Microsoft Products.

I wanted to write a book that serves as a definitive reference for as many Registry parameters as possible. As you will discover, the book has gone far beyond that. I discuss indirect issues relating to the Registry, including troubleshooting topics relating to backing up and booting. And don't forget that a book about Windows NT is not really a book about NT unless it discusses those infamous blue screens of death.

I have this saying that I tell all of my students when I am on the road: "Once a student, always a student." Many students take me up on it and send me e-mail from time to time asking questions about bugs, problems, and NT tweaks. I can't tell you how many times I have to refer to the Registry due to Microsoft's knowledge base documentation, MS Press documentation, etc. After all is said and done, the students write back and say, "It would be a lot easier if they [Microsoft] would just publish all of the entries, where to add them, why to add them, and include a little hand holding along the way."

Intended Audience

This book is recommended for all Windows NT Support Professionals. The Registry is helpful in troubleshooting, and it should also help anybody who needs to implement changes to adjust the fine tuning of Windows NT. All Registry topics relating to Windows NT and the entire BackOffice suite are discussed in this book.

Expectations of the Reader

This book was not designed to serve as a "be-all and end-all" reference to Windows NT, SQL Server, SMS Server, IIS, SNA, and Exchange Server. This

is a very focused book on the structure and entries in the Windows NT Registry; therefore, it is assumed that the reader already has a strong Windows NT foundation. I did not envision this to be a "first" book on Windows NT. This would be the answer to the book searching, Internet searching, and consultant searching for Registry-specific information. When a specific topic is discussed in this book, the reader should probably refer to some additional documentation to understand the concept and theory behind the topic. This book gives the intricate specifics. For example, Chapter 12 discusses Registry entries relating to the general networking services built into NT. This book is already pretty long in its current state; if I were to write a lecture thoroughly explaining the network architecture of Windows NT as well as the many features of its networking services, McGraw-Hill and I would have to start discussing multivolume sets.

Do not read this book from cover to cover. This is not bedside reading. This is designed to serve as a *reference*. Along with a very patient editing staff at McGraw-Hill, I have attempted to prevent this book from reading and flowing like a dictionary, although it has, in some places, taken on the role of a "Registry dictionary."

Naming Conventions

This book uses many naming conventions that are specific to the subjects in this book. There will also be specific formatting for some of these conventions. For example, as you read through the various chapters, you will see many references in the following format:

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\FileSystem
```

This refers to what is called a Registry path. This is similar to a directory path. The following example,

```
FileSystem
```

actually refers to a Registry value. Those two aforementioned types are actually the most common types throughout the book.

It is also important to address a lot of "NT lingo" that is often used in the Windows NT community. We use these a lot through the book in an "off the cuff" fashion. This is not to say that these are officially technical terms. They have just evolved into that. Here are some examples:

Blue screen of death	Windows NT kernel-mode crash
The Resource Kit	Utilities and documentation that Microsoft expects you to pay extra to obtain but should have included inherently with Windows NT
Service packs	Bug fixes
Console commands	DOS commands
MS batch commands	DOS batch commands

The Organization of the Book

This book is divided into three parts. The first part, which teaches you the Registry, will not simply rehash Microsoft's built-in on-line help descriptions that first introduced you to the Registry, but will go into a more comprehensive analysis of its structure and management. The second part begins the reference of entries relating to Windows NT. The section will have those references divided into categories by chapter. The third section is the reference for the BackOffice products. Naturally, if you are reading this book cover to cover, you will have an excellent understanding of the Registry well before you reach that portion of the book.

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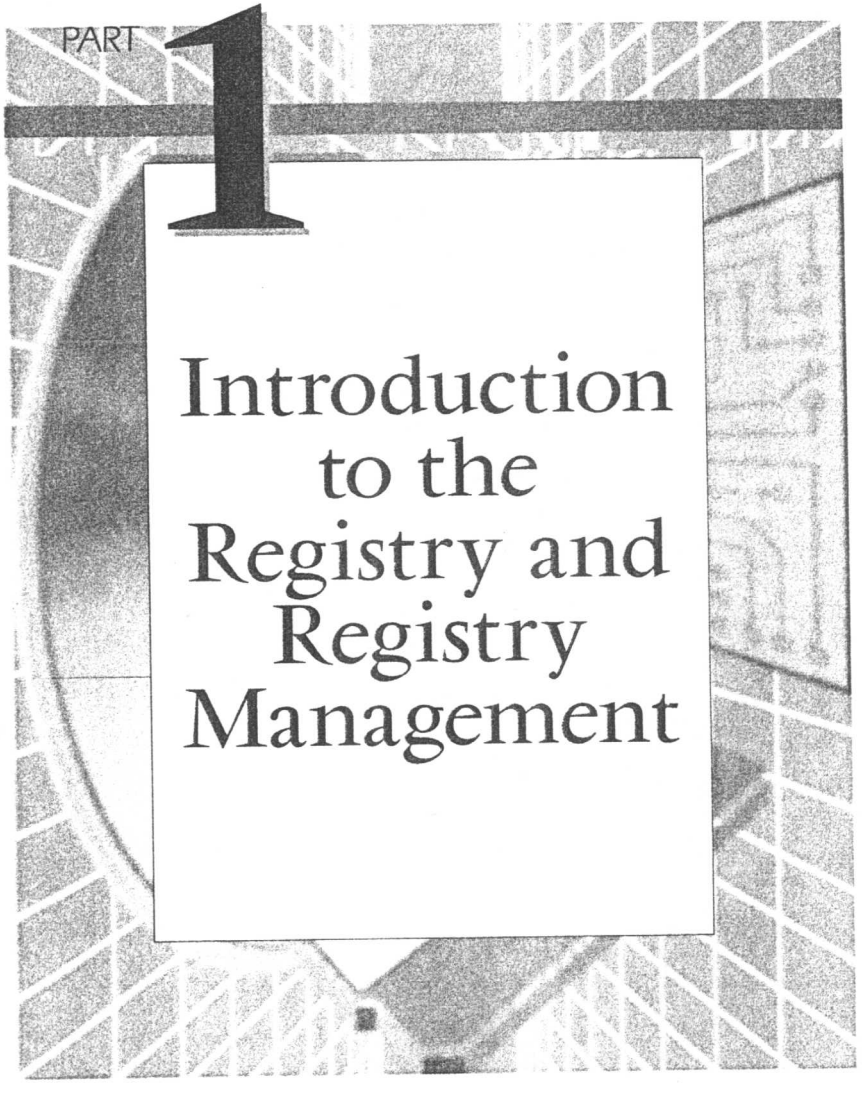
PART
1
Introduction to the Registry and Registry Management

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