

Master Troubleshooting Tricks for Windows

Volume 1

By Microsoft MVP's:

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PUBLISHED BY

MVPDays Publishing

<http://www.mvpdays.com>

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ISBN: TBD

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Feedback Information

We’d like to hear from you! If you have any comments about how we could improve the quality of this book, please don’t hesitate to contact us by visiting www.checkyourlogs.net or sending an email to dave@mvpdays.com.

Foreword by

Acknowledgments

From Dave

Cristal, you are my rock and my source of inspiration. For the past 20 + years, you have been there with me every step of the way. Not only are you the “BEST Wife” in the world, you are my partner in crime. Christian, Trinity, Keira, Serena, Mickaila, Mackenzie, and Rycker, you kids, are so patient with your dear old dad when he locks himself away in the office for yet another book. Taking the time to watch you grow in life, sports, and become little leaders of this new world is incredible to watch.

Thank you, Mom and Dad, (Frank and Audry) and my brother Joe. You got me started in this crazy IT world when I was so young. Brother, you mentored me along the way, both coaching me in hockey and helping me learn what you knew about PCs and Servers. I’ll never forget us as teenage kids working the IT Support contract for the local municipal government. Remember dad had to drive us to site because you weren’t old enough to drive ourselves yet. A great career starts with the support of your family, and I’m so lucky because I have all the support one could ever want.

Last but not least, the MVPDays volunteers, you have donated your time and expertise and helped us run the event in over 20 cities across North America. Our latest journey has us expanding the conference worldwide as a virtual conference. For those of you that will read this book, your potential is limitless; just expand your horizons, and you never know where life will take you.

About the Authors

Dave Kawula – Microsoft MVP

Dave is a Microsoft Most Valuable Professional (MVP) with over 20 years of experience in the IT industry. His background includes data communications networks within multi-server environments, and he has led architecture teams for virtualization, System Center, Exchange, Active Directory, and Internet gateways. Very active within the Microsoft technical and consulting teams, Dave has provided deep-dive technical knowledge and subject matter expertise on various System Center and operating system topics.

Dave is well-known in the community as an evangelist for Microsoft, 1E, and Veeam technologies. Locating Dave is easy as he speaks at several conferences and sessions each year, including TechEd, Ignite, MVP Days Community Roadshow, and VeeamOn.

Recently Dave has been honoured to take on the role of Conference Co-Chair of TechMentor with fellow MVP Sami Laiho. The lineup of speakers and attendees that have been to this conference over the past 20 years is fantastic. Come down to Redmond or Orlando in 2018, and you can meet him in person. Check out his speaking site at <https://sessionize.com/dave-kawula/>

He recently tied for 1st place out of 1800 speakers at the Microsoft Ignite Conference in Orlando.

As the founder and Managing Principal Consultant at TriCon Elite Consulting, Dave is a leading technology expert for both local customers and large international enterprises, providing optimal guidance and methodologies to achieve and maintain an efficient infrastructure.

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Cristal Kawula – Microsoft MVP

Cristal Kawula is the co-founder of MVPDays Community Roadshow and #MVPHour live Twitter Chat. She was also a member of the Technical Advisory board and is the President of TriCon Elite Consulting. Cristal is also only the 2nd Woman in the world to receive the prestigious Veeam Vanguard award.

Cristal can be found speaking at Microsoft Ignite, MVPDays, and other local user groups. She is extremely active in the community and has recently helped publish a book for other Women MVP's called Voices from the Data Platform.

This year at Microsoft Ignite, she leads community meetups for various topics such as Women in IT, Parenting in IT, Diversity in Tech, and becoming a Community Rockstar.

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Emile Cabot – Microsoft MVP

Emile started in the industry during the mid-90s working at an ISP and designing celebrity web sites. He has a strong operational background specializing in Systems Management and collaboration solutions and has spent many years performing infrastructure analyses and solution implementations for organizations ranging from 20 to over 200,000 employees. Coupling his wealth of experience with a small partner network, Emile works very closely with TriCon Elite, 1E, and Veeam to deliver low-cost solutions with minimal infrastructure requirements.

He actively volunteers as a member of the Canadian Ski Patrol, providing over 250 hours each year for first aid services and public education at Castle Mountain Resort and in the community.

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Cary Sun – Microsoft MVP

Cary Sun is CISCO CERTIFIED INTERNETWORK EXPERT (CCIE No.4531) and MCSE, MCIPT, Citrix CCA with over twenty years in the planning, design, and implementation of network technologies and management and system integration. Background includes hands-on experience with multi-platform, all LAN/WAN topologies, network administration, E-mail and Internet systems, security products, PCs and server environment. Expertise in analyzing user's needs and coordinating system designs from concept through implementation. Exceptional analysis, organization, communication, and interpersonal skills. Demonstrated ability to work independently or as an integral part of a team to achieve objectives and goals. Specialties: CCIE / CCNA / MCSE / MCITP / MCTS / MCSA / Solution Expert / CCA

Cary's is a very active blogger at [checkyourlogs.net](http://www.checkyourlogs.net) and always available online for questions from the community. His passion for technology is contagious, and he makes everyone around him better at what they do.

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John O'Neill Sr – Re-Connect Microsoft MVP

John's professional IT career began as a teenager, taking him on many incredible adventures over the past 30 years. John's IT path started with programming but branched out quickly. Opportunities from the Help Desk to the Corner Office shape his IT journey. Specializing in Systems and Infrastructure technologies, John's broad skill set includes Desktop and Server OS, Identity Management, Networking Services, Network Architecture, IP Telephony, and Security.

Passionate about giving back to the IT community, John develops relevant, timely content that IT Pros take advantage of immediately. Part of the MVPDays team, he develops both online and in-print content. Also, John authored material as a contributing editor for the Petri.co.il online community as well as a senior contributor to Tom's IT Pro, Redmond Magazine, Netwrix, and both Thomson-Reuters' Aspatore Books and Exec Blueprints publications.

Helping others succeed and advance in IT drives John to share knowledge. Speaking at conferences worldwide, developing technology training courses for Pluralsight's online training library, and leading webinars are all regular investments by John in the current and next generation of IT professionals. Blending high-tech education with a bit of entertainment, attendees at John's sessions regularly rate him one of their favourite speakers.

John is proud to be honoured by industry organizations, leaders, and especially his peers. A four-time recipient of Microsoft's MVP Award, John received NEOSA's CIO of the Year Award in 2012.



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Introduction

MVPDays Online

The purpose of this book is to showcase the fantastic expertise of our guest speakers of MVPDays Online. They have so much passion, expertise, and expert knowledge that it only seemed fitting to write it down in a book.

MVPDays was founded by Cristal and Dave Kawula back in 2013. It started as a simple idea; “There’s got to be a good way for Microsoft MVPs to reach the IT community and share their vast knowledge and experience in a fun and engaging way” I mean, what is the point in recognizing these bright and inspiring individuals, and not leveraging them to inspire the community that they are a part of.

We often get asked the question, “Who should attend MVPDays”?

Anyone that has an interest in technology is eager to learn and wants to meet other like-minded individuals. This Roadshow is not just for Microsoft MVP’s it is for anyone in the IT Community.

Make sure you check out the MVPDays website [at www.mvpdays.com](http://www.mvpdays.com). You never know maybe the roadshow will be coming to a city near you.

The goal of this particular book is to help the Modern IT Pro troubleshoot common problems with Windows Server, Azure, Veeam Backups, Azure Stack HCI, Hyper-V, and much more.

Sample Files

All sample files for this book can be downloaded from www.checkyourlogs.net and

Additional Resources

In addition to all the tips and tricks provided in this book, you can find extra resources like articles and video recordings on our blog <http://www.checkyourlogs.net>

Troubleshooting

Windows Server Issues

This book is dedicated to all of those IT Pro's out there that have to troubleshoot Windows Server environments on a daily basis. We know this can be a tedious task, and sometimes our best friend, "Google" just doesn't have all the answers. We have dug into the vaults to find these solutions to problems you might have seen or will see. Everything you will read about comes from actual troubleshooting cases from our team.

The Case of the Mysterious Reboot

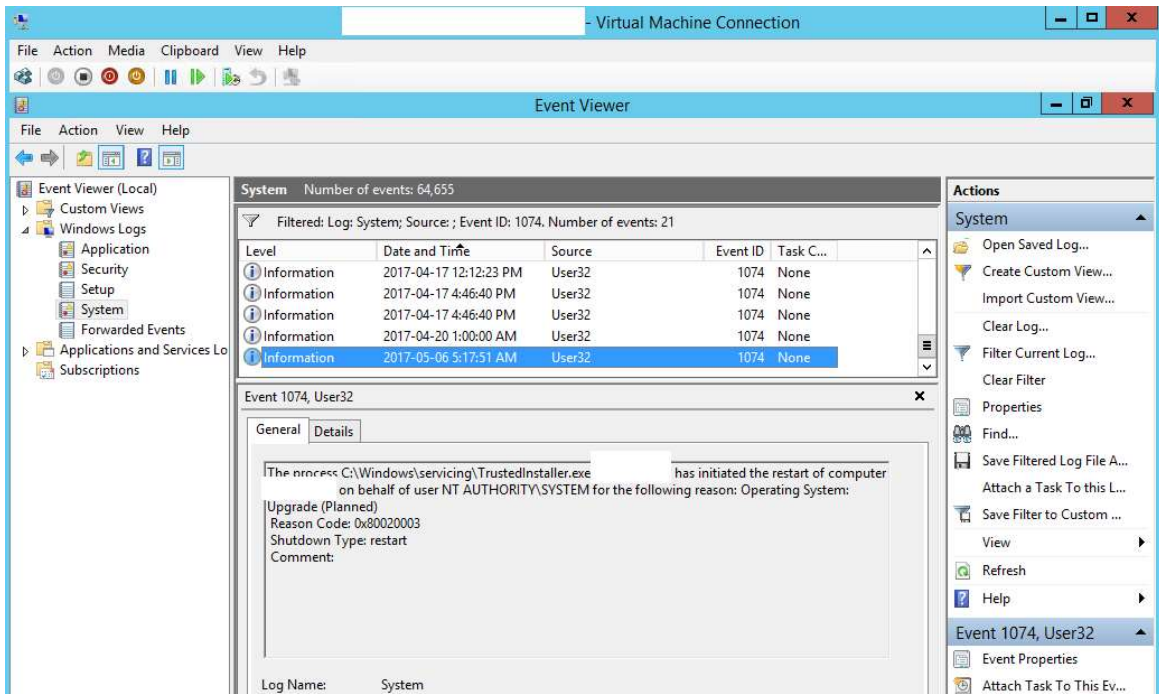
This case was from a ticket that we had back in May of 2017. The customer had complained that servers were randomly rebooting. Below are our case notes we had from this issue.

Case Notes

1. The App Server had a scheduled task to reboot every 2nd Thursday at 1:00 AM Note: You have since disabled this scheduled task, and it hasn't been in effect since 04/20/2017
2. Windows updates are coming down via a Cloud Patching Solution on 05/06/2017 --> The updates were installed on 05/04/2017, and it looks like A Cloud Patching Solution Rebooted the system on 05/06/2017 at 5:17 AM
(I kept the name of the Cloud Patching Solution anonymous for privacy reasons)

Troubleshooting

We can see it was NT Authority\System that shut down the system due to operating system upgrades (Patches).

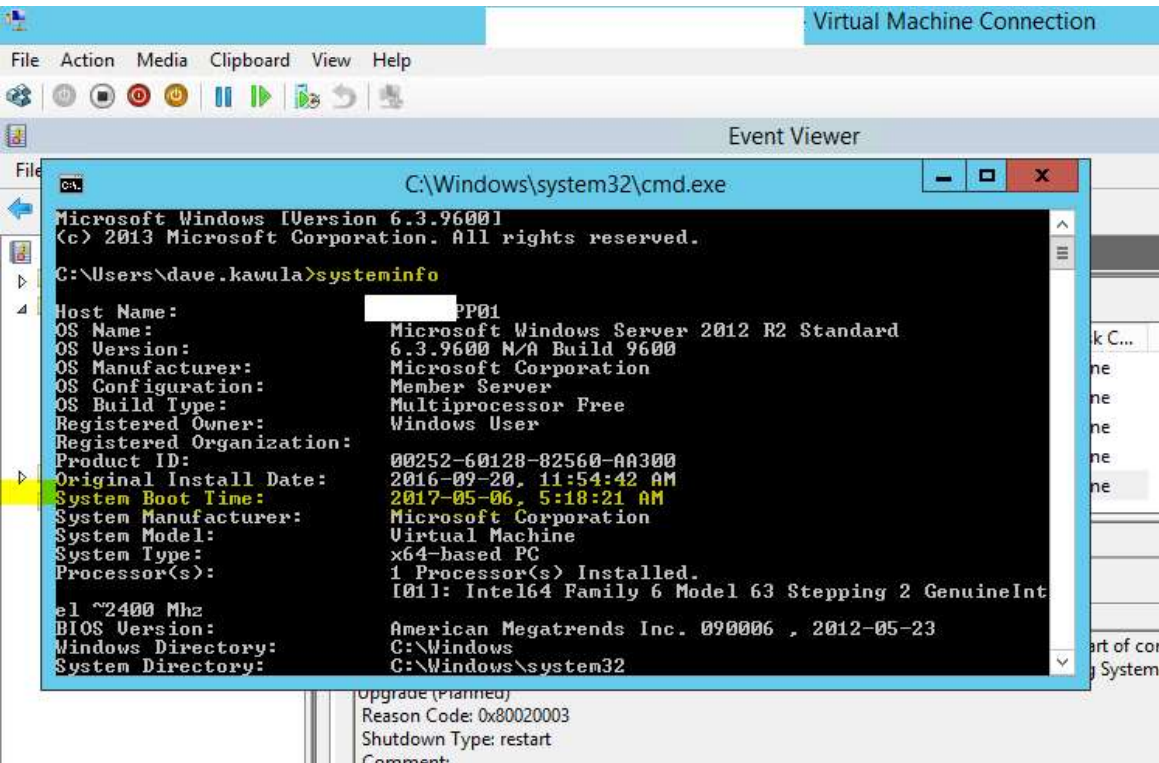


Event ID 1074 can be used to trace the planned shutdown events.

So, it appears that in my opinion, the Cloud Patching Solution Policy has applied to this server, and that is the cause of the expected reboots.

Also, the System Time isn't a direct Correlation to uptime in Windows.

Inside of Windows, you can type in a CMD Prompt:



Now, if we check Hyper-V Manager, it is lying to us.

| Virtual Machines | | | | | | |
|------------------|---------|-----------|-----------------|-------------|--------|--|
| Name | State | CPU Usage | Assigned Memory | Uptime | Status | |
| 012R2Ref | Running | 3 % | 4096 MB | 25.11:23:23 | | |
| 012R2Ref2 | Off | | | | | |
| PP01 | Running | 3 % | 16384 MB | 00:29:37 | | |
| uildTest01 | Running | 0 % | 4096 MB | 06:16:14 | | |
| uildTest02 | Running | 0 % | 2048 MB | 13.04:40:17 | | |
| C01 | Running | 5 % | 16384 MB | 2.13:33:40 | | |
| T01 | Running | 0 % | 12288 MB | 2.13:35:23 | | |
| IDT01 | Running | 0 % | 12384 MB | 4.09:25:48 | | |
| IDT02 | Running | 0 % | 12384 MB | 4.08:51:22 | | |
| DSH01 | Running | 0 % | 4096 MB | 3.00:51:12 | | |
| /in10Ref | Off | | | | | |

Based on this it appears that this box has only been up and running for a grand total of 29 minutes. This is not the case I would trust the System Info. If the VM is Live Migrated around the Hyper-V Cluster, it will reset this counter in Hyper-V.

On Node A, you can see that I have some of my build VM's that aren't part of the cluster on the same storage, and they are showing 3,4,5 + days of uptime.

Recommendation: I would recommend that you remove these servers from the Cloud Patching Solution, and we manually patch them for the time being. This will tell us quite clearly what the issue is.

FYI --> When a system shuts down unexpectedly. It throws an event ID of 1076 in the System Log. What we looked for in 1076 is if there is a BugCheck String. This indicates that the unexpected shutdown was due to something like a Blue Screen.

