



# Inside **OUT**

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Hundreds of timesaving solutions  
Supremely organized, packed  
with expert advice  
Companion eBook + videos

# Windows 8.1

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- Attempt to print from the same app to the same printer but from a different computer. If this works, the problem is specific to the computer, which could mean a hardware problem, a software configuration error, or a problem with software versions.

Some problems are more difficult to isolate. If you can't isolate a problem, start by searching the Internet for help. Then, post a message in a support forum. Finally, contact technical support.

## Inside OUT

### *What are drivers?*

Drivers are pieces of software that handle communications between Windows and your computer hardware. Think of it like world languages: Windows speaks only one language, but each piece of hardware speaks its own unique language. The driver is the translator, allowing Windows to speak to any piece of hardware without having to learn thousands of different languages.

Hardware manufacturers create most drivers because they're the ones who best understand the language their devices speak. However, Microsoft tests and approves many drivers to reduce the risk that they'll cause your computer to crash. When Microsoft approves a driver, they distribute it through Windows Update, so you can install the driver automatically when you first connect hardware to your computer. Windows Update also allows you to automatically receive new versions of drivers.

Technically, it would be possible for Windows to learn every different language. However, that would require hardware manufacturers to contribute code directly to Windows, which would reduce reliability and make the development process very difficult. It would also make distributing updates more difficult.

### NOTE

If you're not sure who the app developer is, open the app, access the Settings charm, and then click About. This usually provides the name of the developer.

## Searching the Internet

For better or worse, you're probably not the first person to have any specific problem. Odds are very good that someone else had the problem and posted a message about it. There's even a good chance that they found the solution to their problem, and that solution will work for you, too.

Here's a good process for finding webpages related to your problem. If at any time you find no useful results, it's probably time to post your own question.

- Search the Internet for your exact problem, enclosing the phrase in quotation marks. For example, if the Computer Management console crashes with an error message, you might search for **"Microsoft Management Console has stopped working."**
- If the results are related to different problems, make your search more specific. For example, you might search for **"Computer Management" "Microsoft Management Console has stopped working."**
- If you still have too many results, try narrowing the scope of your search to people discussing the problem on Internet forums. Google allows you to do this by selecting Discussions from the left side of the search results.

If the problem is related to Windows (as opposed to an app), use these same techniques to search Microsoft Support, available at <http://support.microsoft.com>. Microsoft Support includes Microsoft's massive public knowledge base of technical information and answers from Microsoft communities. When Microsoft discovers a bug or other technical issue, they often create a TechNet article that describes the issue and suggests a workaround.

## Asking for help

The Internet community has a bad reputation for responding to sincerity with sarcasm and hostility, and that reputation isn't completely undeserved. However, there's a massive population of generous and knowledgeable people willing to do their best to help complete strangers with problems.

Before you ask for help, make sure you have done your best to find an answer to your problem:

- Restart your computer and any hardware devices related to the problem.
- Install all important updates from Windows Update.
- Install any updates available from the app developer or hardware vendor.
- Examine online Help, if it's available.
- Search the web for your error message.
- Check the app developer or hardware vendor's website for troubleshooting instructions.

Now you're ready to find a help forum. You want to find the forum most closely related to the problem you're experiencing. If you can't print from any app on your computer,

you should browse the printer manufacturer's website for a support forum. If you're having a problem with an app, find the app developer's website and visit their forum. If you're having a problem with Windows, visit the Windows Community (see Figure 8-2) at <http://windows.microsoft.com/en-us/windows/help/community>. Microsoft Most Valuable Professionals (MVPs) and even Microsoft full-time employees often help answer questions.

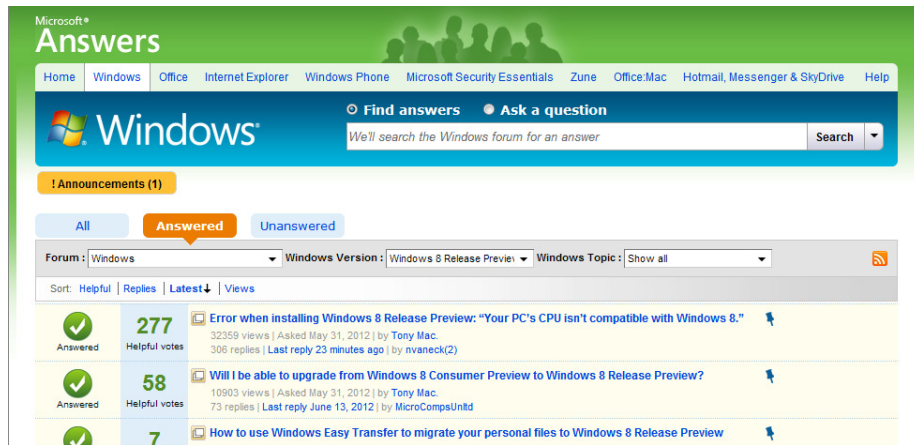


Figure 8-2 The Windows Community is a great place to find free volunteer help.

You're almost ready to post. Before you do, make one last search for your problem using the forum's search engine. Internet search engines don't always return the latest messages, so you might find a recent message related to your problem.


Some websites have forums for different types of issues. For example, the Windows Community has separate forums for Windows 8.1, Windows 7, and Windows XP. Find the forum that best suits your question, and create a new message.

You want to provide people all the information they might need to diagnose your problem and provide a recommendation. At a minimum, provide:

- A detailed description of the problem. Specify the exact steps you follow to reproduce the problem. For example, you might say, "When I try to print from any app, I get the error message, 'Could not connect to printer.'"
- An overview of the troubleshooting you've already done and what the results were. For example, you might say, "I installed the latest drivers from the hardware manufacturer. I rebooted my computer and my printer and tried connecting the printer to a different Windows 8.1 computer, but the problem continues. When I connect the printer to a Windows 7 computer, it works properly."

- The version of Windows that you're using, including the service pack, if any. Mention that you've installed every important update from Windows Update. For example, you might say, "I'm running Windows 8.1 with all available updates."
- If it's an app problem, the full name of the app, and the version if you can find it. For example, you might say, "I'm running the Photos app version 1.2."
- If it's a hardware problem, the make and model of the device and how it is connected to your computer. For example, you might say, "My printer is the Brother MFC-J825DW, and I connect to it with a USB cable."
- If it's a performance problem, provide your computer's specifications. For example, you might say, "I'm using a Dell XPS 13."

With your message crafted, you need to wait anywhere from several hours to several days for a reply. You might not get a reply at all; if you have a problem nobody has experienced before, no one on the forum will know how to solve it.

 **Finding help online** Watch the video at <http://aka.ms/WinIO/help>.

Here are a few etiquette tips to follow:

- Post one message. If you don't get any replies in two days, you can post in a different forum.
- Be responsive. If someone writes back with questions, do your best to answer them promptly.
- Follow up. If you solve your problem, write a reply describing exactly how you solved it. Others with the same issue will benefit from your experience.
- Be polite. The people helping you are volunteers and are not paid for their work. They deserve a BIG thank you!
- Relax. The problem feels urgent to you, and other people want to help, but they are volunteers, and your problem isn't an emergency to them. Don't say things like, "URGENT: NEED HELP!!!" If you really need a response within minutes, contact professional technical support.
- Return the favor. Browse the forum and see whether other people are having problems you can solve. If you have skills that aren't related to computers, there are forums where people need your skills. Help them out, and you help to keep the best part of the Internet alive.

## Connecting with Remote Assistance

With Remote Assistance, someone can connect to your computer across the local network or the Internet and share your desktop with you. This way, you can easily show them what's happening and they can try to fix it. Of course, since you're reading this book, it's more likely that you'll be the one providing the assistance.

### Inside OUT

#### *The technology behind Remote Assistance*

Remote Assistance, and the very closely related Remote Desktop, offer really amazing performance. Over all but the slowest of Internet connections, you'll feel like you're sitting right at the other computer.

Remote Assistance and Remote Desktop are based on the Remote Desktop Protocol (RDP). It doesn't work by streaming the computer's display across the Internet; if it did, the performance and quality would be more like watching a video across the Internet. You'd need a great deal of bandwidth for reasonable performance, and it wouldn't work at all across slower links.

Instead, RDP connects deeply into Windows, transmitting low-level messages about the desktop environment rather than individual pixels. Therefore, when you open the Calendar app across a remote connection, RDP sends a message saying, "Draw a gray background. On that background, write June 2012 in the upper-left corner. Draw a series of boxes with numbers in their lower-right corners." This is much more efficient than individually describing the color of the roughly one million pixels that appear on the screen.

This method is in stark contrast to the best free tool I've used: Virtual Network Computing (VNC). VNC seems to transmit your screen pixel by pixel without knowledge of the underlying apps. As a result, it's much slower.

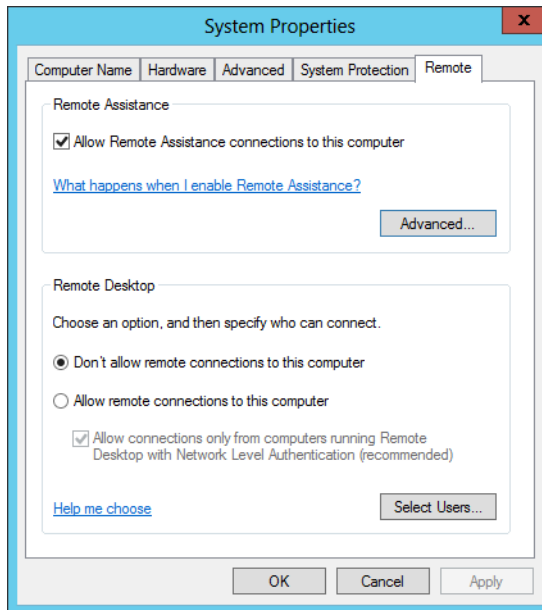
With this understanding of how RDP works, you can understand the scenarios when it doesn't work very well: viewing pictures and videos. While both types of content can be compressed before transmitting, it's not nearly as efficient as transmitting low-level application messages. Therefore, don't plan on using RDP for watching videos or editing pictures—unless you're on a very fast network, it'll probably be too slow.

## Enabling Remote Assistance

Remote Assistance is enabled by default. If you're security conscious, this might sound scary, as if anyone could connect to your computer. It's not that easy; before anyone connects to

your computer, they need an invitation, and the invitations are cryptographically protected. Of course, if you don't plan to use Remote Assistance, you should disable it, because reducing the attack surface is always a useful way to improve security.

To enable or disable incoming Remote Assistance invitations, use the Remote tab of the System Properties dialog box, as shown in Figure 8-3. You can open this dialog box by searching Settings for **Assistance**, and then clicking Allow Remote Assistance Invitations To Be Sent From This Computer.



**Figure 8-3** Enable or disable Remote Assistance from the System Properties dialog box.

If you want other people to be able to view your computer but not control it, click Advanced, and then clear the Allow This Computer To Be Controlled Remotely option. You don't need to enable or disable Remote Assistance for outgoing connections, which you would use to help someone else; you can always accept a Remote Assistance invitation.

## Creating a Remote Assistance invitation

To create a Remote Assistance invitation (which you can use to help someone or get help), search Settings for **Assistance**, and then click Invite Someone To Connect To Your PC And Help You, Or Offer To Help Someone Else. This opens the Windows Remote Assistance wizard, shown in Figure 8-4.