Virtual DataWorks

TECH BYTES

April 2025

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Your Comprehensive Monthly Update on Technology and Cybersecurity Trends

Stay informed about the latest tech advancements and trends to make better decisions and adapt to changes in the industry.

Matthew DeWees
-President

Have you ever wondered about the differences between malware and ransomware? These days, knowing how to spot each one is not just a matter of technical knowledge—it's a crucial aspect of cybersecurity.

From personal data protection to keeping business operations safe, knowing how to point out and defend against these digital threats is vital. But what does this mean for you and your sensitive data?

Recognizing the signs of malware and ransomware could be the key to preventing devastating cyberattacks. Whether you're an individual user or managing enterprise-level systems, the ability to differentiate between these threats is essential.

Ready to enhance your cybersecurity knowledge and protect yourself from these evolving threats? Contact us at everythingit@virtualdataworks.com to learn more about defense strategies against malware and ransomware.

Until then, stay safe,

Matthew DeWees

President

DID YOU KNOW?

The "Easter Egg" technique in programming, where developers hide features, is also used in cybersecurity training to help users find hidden vulnerabilities and think creatively about security!

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SPOTTING THE DIFFERENCE BETWEEN MALWARE AND RANSOMWARE

Bad software includes malware and ransomware. They can damage your computer or steal your data. It is critical to understand the difference between them to protect yourself and your business effectively. This article will help you understand both types of threats.

What is Malware?

Malware is a general term that means "malicious software." This includes many types of harmful programs. Malware can do different bad things to your computer, such as corrupting files or stealing personal information.

Types of Malware

There are many types of malware. Here are some common ones:

- Viruses: These spread from one computer to another.
- Worms: They can copy themselves without your help.
- Trojans: They trick you into thinking they're good programs.
- Spyware: This type watches what you do on your computer.

What Malware Does

Malware can cause a lot of problems. It might:

- Slow down your computer
- Delete your files
- Steal your personal info
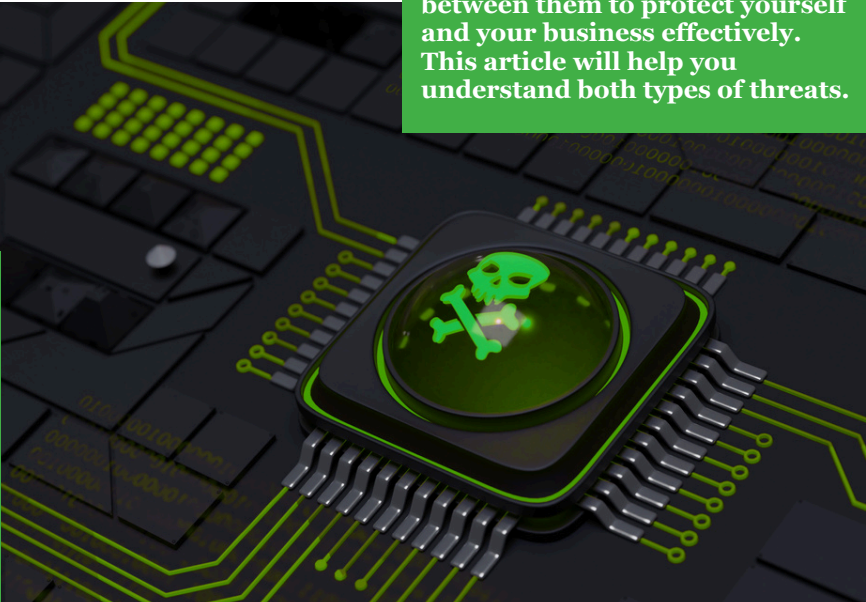- Use your computer to attack others

What is Ransomware?

Ransomware is a type of malware. It locks your files or your entire computer. Then it demands money to unlock them. It is a form of digital kidnapping of your data.

How Ransomware Works

Ransomware goes by a pretty basic pattern:

1. It infects your computer, normally through an e-mail or download.
2. It encrypts your files. This means it locks them with a secret code.
3. It displays a message. The message requests money to decrypt your files.
4. You may be provided with a key to unlock the files if you pay. In other cases, the attackers abscond with your money.

Types of Ransomware

There are primarily two types of ransomware:

- Locker ransomware: This locks the whole computer.
- Crypto ransomware: This only encrypts your files.

How are Malware and Ransomware Different?

Goals

- Malware: Harm your computer, steal data, or use your computer for attacks.
- Ransomware: Lock your files and demand payment.

Methods

- Malware: Works in secret. You might not know it's there.
- Ransomware: Shows up. It needs to make its presence known on your computer and demand money for its removal.

Effects

- Malware: There are several different effects malware can have on your computer.
- Ransomware: Computer or important files are always locked.

How Does It Get onto Your Computer?

Common Entry Points

- Through email attachments
- Via phony websites
- Via a USB drive with an infection
- From using outdated software

How Can You Protect Yourself?

- Keep your software up to date
- Use strong passwords
- Don't click on strange links or attachments
- Backup your files regularly

Why It Pays to Know the Difference

- Better Prevention. The more you know what you are against, the better your chance at taking the right steps to keep yourself safe.
- Faster Response. If you are under attack, knowing what type of threat it is helps you take quicker action.

We want to keep you secure in the face of all of cyberthreats. Contact us if you need more information.

CYBER SECURITY SERVICES

Our services—risk assessment, threat detection, and incident response—secure your data and ensure smooth operations. From small businesses to large enterprises, we have the expertise to protect your digital assets.

SECURE YOUR DATA ›

Virtual DataWorks

03 8 CONSIDERATION BEFORE BUYING USED TECHNOLOGY

We depend on our devices daily, so they need to perform well. A slow or malfunctioning device can disrupt productivity, but buying new isn't always the best option. Here are eight factors to consider before purchasing a used device.
8 Things to Consider Before Buying Used Technology

Buying used tech can save money. In 2023, 70% of consumers engaged in this market, projected to reach $2.7 trillion by 2025. However, it's important to be cautious. Consider these key points:

1.Is the Device Still Supported?

Check if the device receives updates. Older models may lack new software, compromising security. Without regular updates, they become vulnerable to cyber threats. Always ensure the device can be updated and research the manufacturer's support policies to know how long it will remain safe to use.

2.Device Age

The age of a device matters significantly. Newer devices typically perform better and have greater durability. If the device is several years old, you may encounter performance issues.

Check when the device was released to gauge its age. Explore newer models to understand their capabilities and determine if the older device meets your functional needs.

3.Battery Health

Assess the battery health, as it affects usability. Some vendors provide this information. A healthy battery allows for longer use without frequent charging. If the battery is weak, consider the cost of replacement when evaluating the device's overall price.

4.Visible Damage

Check for visible damage, like cracks or dents, which may indicate prior drops. Signs of water damage, such as discoloration or rust, can suggest serious internal issues. Major damage can impact performance and decrease the device's value.

5.Included Accessories

Ensure all necessary accessories, like chargers and cables, are included with the device. Missing items may lead to additional costs later. Extra accessories, such as cases or headphones, are also beneficial if included.

6.Return Policy

Understand the return policy before purchasing. Knowing the terms allows you to return the device if issues arise. A warranty can also help with repairs or replacements, so check these details for peace of mind.

7. Cost Comparison

Compare the price with new and other used options to ensure you're getting a good deal. Sometimes, a new device may not cost significantly more. Research various sellers to avoid overpaying.

8.Can You Try Before You Buy?

It's crucial to test a device before buying, especially in peer marketplaces. If possible, meet the seller for an in-person check. If not, request a video demonstration to verify its condition. Alternatively, consider buying from a retailer where you can test the device in-store.

Make sure the device meets your needs and is secure for long-term use. If you find a newer used device at a good price, it could be a great deal. Contact us for help finding a quality option.

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04 IS IT TIME FOR A DEVICE UPGRADE? CHECK FOR THESE 7 SIGNS

Technology is fast, and in no time, our gadgets get outdated. It is quite tricky to determine when an upgrade is needed. Here are the seven main signs that it is time to get a new gadget.

- Is Your Device Slow and Laggy? Slow performance is a major indicator. If your device takes an eternity to boot up, that might be a sign to get an upgrade.
- How's Your Battery Life? Battery problems are a clear upgrade sign. If your device dies quickly, it's a red flag. Needing to charge multiple times a day is not normal. A healthy device should last most of the day on one charge.
- Is Your Storage Always Full? Running out of space all the time? That's a good indication that an upgrade is due. It is frustrating when you can't install new apps. Constantly deleting photos and files is a pain. More storage is one great reason to upgrade.
- Are You Missing Out on New Features? New devices boast cool new features. If your

device can't get the latest updates, you're missing out. Newer models often boast better cameras and screens. They also have faster processors and more memory.
- How Old Is Your Device? Age plays a huge factor in device performance. Most smartphones last around 2-3 years, and laptops, perhaps 3-5 years. Older devices struggle with new software and apps.
- Are Repairs Costing Too Much? If the repair costs are high, upgrading may be wiser. Sometimes, the repair costs are almost equal to a new device. In such cases, it is often better to buy a new one.
- Does Your Device Support the Latest Software? Older devices often can't run new software. This may be a security risk and also means you miss new features. Consider upgrading if your device can't update to the latest OS.

Ready for a Fresh Start?

Don't wrestle with an older, slower device; upgrade to one that will serve you much better. If you need help upgrading, contact us today.

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06 HOW MUCH DEVICE STORAGE DO YOUR REALLY NEED?

Device storage plays a crucial role in determining how many applications, photos, and files you can keep on your device. Understanding your storage requirements is essential for optimal performance. This guide will help you assess how much storage you really need based on your usage habits.

- Basic users: 64GB is perfect for email, social media, and light photo taking.
- Average users: For people who take lots of photos and use many apps, 128GB to 256GB works to cover many apps, photo libraries, and some video storage.
- Power users: If you work with large files or store lots of media, you need 512GB or more. This is for video editing, large game libraries, and huge photo collections.
- Professional users: 1TB or more is common for 4K video production, large datasets, and professional photo editing.

How Much Storage Do You Really Need?

Determining your storage needs can be tricky, and many end up with too much or too little. It largely depends on how you use your device. Here's a quick guide for different user types:

- Basic Users: If you mainly browse the web and use simple apps, 64GB is usually sufficient for email, social media, and light photo taking.
- Average Users: For those who take many photos and use multiple apps, 128GB to 256GB is ideal, accommodating various apps, photo libraries, and some videos.
- Power Users: If you engage in video editing, have large game collections, or extensive photo libraries, consider larger storage options.
- Professional Users: Jobs like 4K video production, managing large datasets, or professional photo editing often require 1TB or more.

WHY CHOOSE
VIRTUAL DATAWORKS

OUR SERVICE

✓ **Unwavering Reliability:** Our IT solutions ensure steady performance, reduce downtime, and enhance care.

✓ **Advanced Security:** Ensuring the security of patient data is paramount. We employ robust cybersecurity to defend your data.

✓ **24/7 Support:** Our team provides around the clock IT support for uninterrupted operations.

✓ **Tailored Services:** We tailor IT strategies to fit the unique needs of your company.

CONTACT US

CLOUD COMPUTING SERVICES

Virtual DataWorks utilizes a combination of cloud computing and local computing. We have coined this effort, "Hybrid Computing." Our customers rave over its practicality, versatility, and convenience. Cloud Computing Services include: Email, Security, Archiving and Updates along with Secure Storage Space.

Cloud Storage
Reliable storage solutions to keep your data secure and accessible

Cloud Hosting
High-performance hosting for your digital assets

Prevention Plans
Explore our comprehensive Microsoft 365 backup prevention plans.

Advanced Security
Comprehensive security measures to protect your data

Comprehensive Microsoft 365 Backup Prevention Plans

Standard

Mailbox

Contacts

Calendars

Exchange Public

1 year Retention with

additional years available

Premium Plus

Mailbox

Contacts

Calendars

Exchange Public

OneDrive

SharePoint

Groups & Teams

Teams Chats

1 year Retention with

additional years available

Premium

Mailbox

Contacts

Calendars

Exchange Public

OneDrive

SharePoint

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