

### This Issue:

- An Introduction to the Dark Web
- 3 Stats that Show Just How Important Data Backup Is
- Virtual Private Networks and Their Role In Your Business
- Cloud-Based Email is Extremely Valuable
- Collaboration in Microsoft Office 365
- Should Your Vendors Need So Much of Your Time?



At this time of Thanksgiving celebration our thoughts turn gratefully to you with warm appreciation.

### An Introduction to the Dark Web



Would it surprise you if you were to find out that over 99% of the Internet is not accessible through search engines? The truth is that the Internet you know, the one with what is seemingly all of history's information on it, makes up around .03% of the entirety of the world wide web. Today, we'll burrow through the surface web and take a look at what is beneath.

In the west, the Dark Web is mostly known as a sinister network used to traffic in all kinds of illegal contraband, but in other parts of the world it is often looked upon as the last bastion of privacy in what can be horribly repressive political regimes. Overall, the Dark Web in practice is a construct that supports user anonymity.

Keep in mind that we are certainly not endorsing use of the Dark Web. We just want you to be aware that the Internet you routinely access, or what we will call the surface web in this blog, is in fact a very small piece of the enormity of the web itself.

*(Continued on page 3)*

### 3 Stats that Show Just How Important Data Backup Is



Whenever we get the chance, we emphasize the importance of having a business continuity plan. The bigger your business, the more important it is to have a comprehensive plan in place--and when your business loses data, it's losing countless opportunities in the future. Your business' future is on the line, and if you don't take steps to protect it now, you could lose everything you've worked so hard to attain in the blink of an eye. Here are some of the most surprising statistics regarding data backup and disaster recovery.

#### Statistic #1: 75% of Small Businesses Don't Have a Continuity Policy

It doesn't matter what kind of business you run. It could be a small mom-and-pop shop or a large business, the importance of continuity is still the same. Ultimately, it comes down to the possibility of a major setback. If you don't have continuity, you might have to close down for a few days until conditions have improved (if they improve).

Imagine the following scenarios:

- Let's say you run a deli or other similar small business. The hardware on your payment card system crashes and you lose your customers' financial information. How do you

*(Continued on page 2)*



**Our Top Tweets**

@AshtonSolutions Oct 12 Hurricane Preparedness; It's Almost Like Cybersecurity <https://t.co/WIT92FdthG>



@AshtonSolutions Oct 8 Got into the office this morning and thought that somebody stole the wall to our conference room! Turns out we are just turning it into a glass wall to open things up a little bit.

@AshtonSolutions Oct 5 Ashton management team spending the day @Culture\_Shoc #CLE digging deeper into #EOS and #Traction

### Our Sales Team Contact Info

#### Jim Abbott

jabbott@ashtonsolutions.com  
216-539-3685

#### Peter Bunevich

pbunevich@ashtonsolutions.com  
216-223-7010

Visit us **online** at:  
[newsletter.ashtonsolutions.com](http://newsletter.ashtonsolutions.com)

"Social Media puts the "public" into PR and the "market" into marketing."  
- Chris Brogan

## Virtual Private Networks and Their Role In Your Business



Employees don't always get all of their work done from the comfort of their office. They often find

themselves on the road for conferences or trying to stay ahead during their downtime at home. Unfortunately, security can become a problem, and access to data needs to be as secure as possible when outside the company network. A virtual private network, or VPN, can be an integral part of your remote business strategy.

### Why Use a VPN?

A virtual private network works by protecting your network from prying eyes while data is in transit. While you're out of the office and connected to a network, any data that moves between your device and your internal infrastructure is susceptible to being intercepted.

Any villain with the right tools could snatch your data while it's moving from one location to the next. A VPN makes this task more difficult for the hacker, if not outright impossible.

*"A virtual private network, or VPN, can be an integral part of your remote business strategy."*

### Understanding a VPN

Any network should be encrypted to keep the data stored on it safe, and a virtual private network takes this one step further by implementing an encrypted connection while out of the office or on a different network. This is particularly helpful if you don't trust the integrity of the web connection you are currently using (and you shouldn't--hotels, coffee shops, and other public places attract all sorts of folks). If data sent to and from a device is encrypted, hackers have a harder time making heads or tails of the data or its purpose, thereby removing the incentive to actually steal it.

To be fair, a VPN doesn't necessarily make it harder for data to be stolen--rather, it makes it harder to be read, analyzed, or interpreted. It transforms the data into a jumbled mess that can only be decrypted by someone who has the encryption key. This makes the data stolen significantly less valuable, as hackers can't really do anything with encrypted data. At the absolute worst, the hacker will spend an insane amount of time trying to crack the encryption, and it's entirely likely that they will simply give up or see it as not worth the effort.

If your business wants to maximize security for remote workers or traveling, a virtual private network is a necessity. Ashton Technology Solutions can help you implement the best one for your budget. To learn more, reach out to us at 216-397-4080.



Share this Article!  
<http://bit.ly/2zRE5V5>

## 3 Stats that Show Just How Important Data Backup Is

(Continued from page 1)

think they would react to this? It might not be stolen, but the situation doesn't help anyone.

- You run a small retail business with several employees. What if one of them checks their email and clicks on a link, installing malware on the computer in the process? Something simple like this can be devastating for a business.

A comprehensive data backup strategy can help you combat threats to your business' continuity. Everything from hardware failure to employee sabotage should be considered for this plan. In other words, you're preparing for a worst-case scenario, and no stone should be left unturned.

**Statistic #2: Over Half of Companies Have Experienced Downtime Lasting Longer Than a Full Work Day in the Last Five Years**

Downtime can end even the strongest

business. If you experience operational downtime on a regular basis, you're not producing anything during that time. This also means that nobody is making sales, and you're paying people to do nothing. From the perspective of data recovery, if you don't have your data backed up and ready to be restored, downtime is a business killer. If you don't have data, you can't get much done.

Redundancy is a key factor for business continuity. A BDR solution provides a network-attached device that can both back up local data and push it to the cloud. This means that it can be found in either location in the event of a disaster, improving the odds of recovering swiftly.

**Statistic #3: Nearly 77% of Malware-Compromised Organizations in 2017 Were Hit By "Fileless" Malware**

It's no surprise that the spread of malware has evolved over the past decade, growing more sophisticated and more

difficult to handle. There have been times in the past where antivirus solutions and firewalls have failed to handle some of the more recent additions to hackers' repertoires of threats, resulting in stolen data and corrupted systems.

That being said, fileless attacks aren't anything new. These types of attacks don't leave behind executable files, making them more difficult to trace back to their sources and remove. Here are some of the more popular fileless techniques used:

- Registry-resistant: Attackers store malicious scripts in the registry to help them survive system reboots and make it hard to remove.
- In-memory: Attackers utilize exploits and code-injection to load and...



Read the Rest Online!  
<http://bit.ly/2zRCrCT>

## An Introduction to the Dark Web

(Continued from page 1)

### A Complete Look at the World Wide Web

If the Internet that we can all access only makes up of a very small percentage of the entire Internet, what is hosted on the rest of it? In what is known as the “Deep Web”, most of the Internet is filled with legitimate data; mostly in the form of unindexed content. Data that is encrypted such as online banking, pay-to-play video services, and other forms of everyday Internet use make up a large portion of the Deep Web. With the revelations that there was an online black market where people could get almost anything, many people started confusing the deep web with the dark web, or darknet. This misconception has many people confused about what exactly the purpose is for the seemingly bottomless Internet, but with most of it being taken up by cloud environments and other encrypted services, the notion that the Deep Web is somehow nefarious is misplaced.

## Cloud-Based Email is Extremely Valuable



The cloud has helped a lot of businesses overcome the boundaries set by the physical workplace. Employees can

access data and applications on a variety of devices that were previously thought to be nothing but time-wasters, allowing for an improved workplace experience and much more flexibility. In particular, cloud-based email allows for enhanced connectivity between your organization’s internal and external resources.

Of course, moving to a cloud-based email solution might seem a little intimidating--especially if you’ve never dealt with a cloud-based service before. We’ll help you make the jump with four tips and tricks to consider for this process.

### How is Your Email Being Hosted?

First, you’ve have to determine whether

### What is the Dark Web?

On the other hand, the Dark Web is also hosted on the Deep Web, beyond sight of the average Internet user. While the surface web is unencrypted and able to be accessed by just about anyone who wants to use it, the Dark Web is accessed only through encrypted browsers. You may have heard of specific ransomware programs asking you to download the Tor web browser to make payments. This is because Tor is one of the web browsers able to browse the Dark Web, although it should be mentioned that it’s not exclusively used for the purposes of paying ransomware demands.

Tor is what is known as an onion router. Essentially in order to maintain a user’s anonymity, an onion router will pass user queries through several intermediary accounts to hide the user from being tracked. It’s like passing each command through the several layers of an onion, thus the moniker.

the solution will be hosted in your own personal on-site cloud or if a service provider will host it. If you opt out of managing your own cloud-based email solution, you’ll have to determine if a public cloud is the best place for your email, or if you’d rather have it hosted privately by a managed service provider like Ashton Technology Solutions.

### Be Sure to Include Archiving and Backup

If you’re not taking advantage of archiving and backups for those archives, you could be putting your business in jeopardy. What if you ever have to refer back to past emails to determine who said what in the event of a disaster? You should be sure that you are routinely archiving your emails, as well as backing up those archives to make sure they are always available when you need them.

### Don’t Forget About Security

If you’re storing your organization’s email infrastructure online in the cloud, you’ll have to worry about the security

### What Else is On the Dark Web?

The services offered on the Dark Web are varied, but they all generally have one thing in common--most of them are illegal. If you can think of it, and it’s not on the normal World Wide Web, chances are there is a place on the Dark Web for it. Some of the services provided on the Dark Web can include, but are not limited to, the following:

- Illegal pornography
- Bitcoin services (not outright illegal, but often used for money laundering purposes)
- Botnets that can be bought or purchased for nefarious use
- Markets for drugs, weapons, and other illegal contraband
- Scams and other phishing threats are rampant on the Dark Web, so even...



Read the Rest Online!  
<http://bit.ly/2zRckMi>

of it. Make sure that it’s protected--a firewall, antivirus, and especially encryption. With the amount of sensitive information found in most inboxes, you need to keep it secure.

### Consider the Devices Used

When choosing an email solution, you should think about which devices will be accessing it. Most of the common email applications out there, including Gmail, Microsoft Outlook, and so on, will have mobile applications that can be downloaded to devices for on-the-go access. After all, if you’re implementing cloud-based email to improve access, you want to make sure your employees actually have access to it.

To learn more about how your business can take advantage of cloud-hosted email solutions, reach out to us at 216-397-4080.



Share this Article!  
<http://bit.ly/2zSQQi3>

## Collaboration in Microsoft Office 365



Microsoft Office 365 might look like Microsoft Office, but it has many other features that allow you to make your documents and services more accessible and collaborative than the standard desktop application would. This week's tip is dedicated to helping you get the most out of the features of Office 365--particularly in regard to Microsoft Word.

### Anywhere Access

Unlike the traditional way of doing business, today's workers aren't going to be chained to their desks in the workplace. They can instead work from multiple locations on

myriad devices. OneDrive is perfect for this purpose, as it lets you pull up just about any document in your Drive on another device. Just check your recent history and you should be able to access it on any device.

### Putting In Your Two Cents

Collaboration depends on brainstorming and feedback in order for it to be an effective tool to create new ideas and opportunities. Thanks to Office 365, your team can work together on all kinds of documents. You can add comments, share insights, and even annotate sections as needed.

### Inviting Collaborators

Word 2016 makes it easy to add collaborators to a

document. Through the use of OneDrive, you can share access with anyone who you anticipate accessing the file's location. This is all done through Microsoft People. You'll have the option to share a document via email in a variety of ways, as well as share who can edit or access it.

Microsoft Office 365 was created with the intention of working together, so be sure to take advantage of these features! Do you have any ideas for how these solutions can be used? Give us a call and let us know!



Share this Article!  
<http://bit.ly/2zRTIMc>

At Ashton Technology Solutions, we don't think of ourselves as computer guys, geeks or techies. Instead, we're problem solvers in the business of helping clients leverage technology for lasting business results. We just happen to have some serious technical skills as well. Of course we can talk geek with the best of them, but that's just the starting point for what we do, not the heart of it.

While we do take pride in delivering the most technically elegant solutions, at Ashton, we get the biggest satisfaction from integrating into our clients' processes, helping them look ahead, avoid trouble, and find better and more cost-effective methods of operating. In other words, we become partners in their growth. Ultimately, we earn our real enjoyment by watching our clients grow and prosper right along with us.

## Should Your Vendors Need So Much of Your Time?



Vendors can be impossible to deal with, and this problem escalates when you have quite a lot of them. Every service or product your business takes advantage of comes from a vendor, and if you have to work directly with them every time something goes awry, you're looking at a lot of wasted time and effort. Thankfully, there's an easier way to work with your

vendors, and ironically, it involves not working with them at all--but let's not get ahead of ourselves. There's a process you need to go through before you can most efficiently take advantage of vendor management services.

### Inventorying Your Vendors

To better manage your vendors, you first need to take an inventory of every single company your business purchases services or goods from. This includes everything from your network

infrastructure to your Internet service provider. If you have other vendors through which you receive network security or other business technology solutions, be sure to include those as well. In other words, list any organization that your business deals with for goods, services, or solutions. Chances are that it's an impressive list...



Read the Rest Online!  
<http://bit.ly/2E6vamM>

## Ashton Solutions

23625 Commerce Park  
Suite 130  
Beachwood, Ohio 44122  
Voice: 216-397-4080



[newsletter@ashtonsolutions.com](mailto:newsletter@ashtonsolutions.com)



[facebook.ashtonsolutions.com](https://facebook.ashtonsolutions.com)



[linkedin.ashtonsolutions.com](https://linkedin.ashtonsolutions.com)



[twitter.ashtonsolutions.com](https://twitter.ashtonsolutions.com)



[blog.ashtonsolutions.com](https://blog.ashtonsolutions.com)

Visit us online at:

[newsletter.ashtonsolutions.com](https://newsletter.ashtonsolutions.com)

