

WINTER 2019

< THE SOURCE >

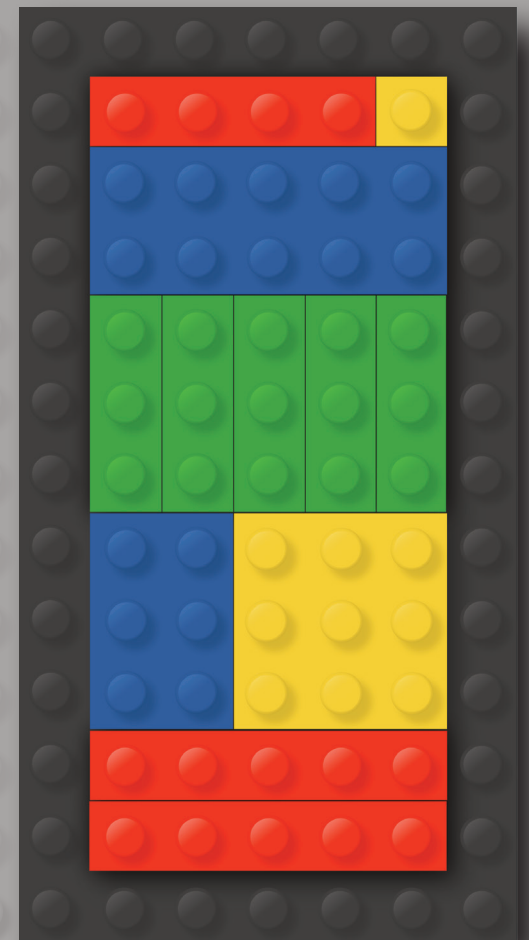
Hints, tips, tools and resources from real IT geeks.

Getting creative with NAS.

We look at increasing network storage to keep up with your organizations growth, *BLOCK* by *BLOCK*.

IN THIS EDITION

- Software Defined Storage
- Security Awareness Training
- Spiceworks Forms
- NAS - Storage and More
- Office 365 Authentication
- The E-rate Process



Welcome!

Welcome to the Winter 2019 edition of **The Source** - hints, tips, tools, and resources for IT novices and experts alike.

In this edition, we look at how Software Defined Storage can help you expand capacity as your needs grow, and we share real examples of how poor security training can defeat even the best tech solution. We also look at how customizing your IT ticket forms can improve problem resolution times, disabling basic authentication on Office 365 can protect your users' inboxes and how a NAS can do much more for you than store files. Finally, we walk through the E-Rate process for 2019-20.

I hope you find the magazine useful and if you have any other questions check out our blog, connect with us online or give us a call.

Sincerely, Jesse.



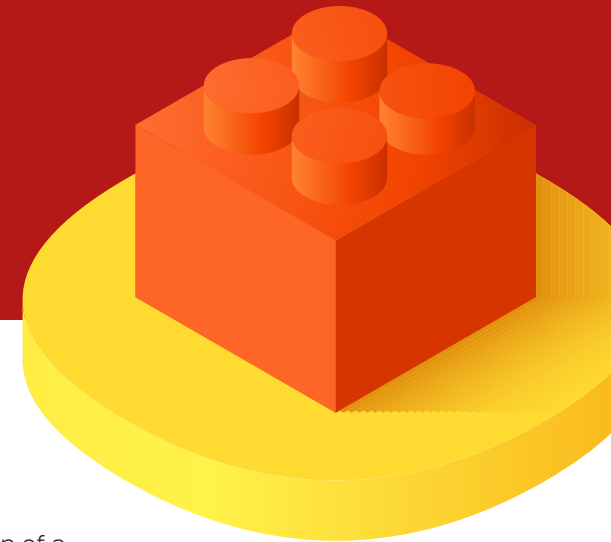
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An experienced network engineer, Jesse has been sharing his expertise and experience with schools and school districts in Wisconsin for over 18 years.

CONTENTS

- Software Defined Storage
- Security awareness training
- Spiceworks forms
- Using a NAS as an Active Directory server
- Disabling basic authentication in Office 365
- The E-Rate process

EVERYTHING IS AWESOME!

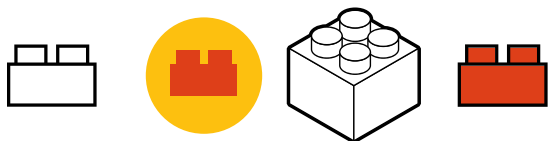


Software defined storage.

Where and how to store your precious data is a conundrum all IT specialists need to grapple with sooner or later, and one of the things you have to address early on is the issue of cost vs. resiliency. Too much resiliency and it hurts your departments budget, too little and it could hurt the business.

And of course, once you have your storage, what utilities can you use to back it up?

In today's software-defined "everything" world there are many options for the who, what and where of storage, with one possible solution being Software Defined Storage (SDS).



SDS allows traditional server systems to leverage internal disks and present them (through software) as a "SAN" across the infrastructure. In many cases, the vendor will have options for network RAID, iSCSI, fast cache SSD, WAN storage and more.

Software Defined Storage lets you add additional capacity later if growth demands it, is independent of vendor hardware, and offers a faster implementation than traditional hardware-based storage systems.

Consider this: If your current system has 2 physical servers serving as virtualization hosts, there are limitations to what can be done with the virtual machines that reside on the local hardware disks.

With the simple addition of a Software Defined Storage solution, those same disks could become part of a 2 node SAN and presented back to the virtualization host to again host virtual machines.

The new setup would allow for a greater level of fail-over and an opportunity to perform maintenance during the daytime and avoid service interruptions for users.

→ OPTIONS FOR SDS

Datcore:
DATACORE.COM

HPE StoreVirtual VSA:
HPE.COM

Nutanix:
NUTANIX.COM

Starwind:
STARWINDSOFTWARE.COM

vSAN:
VMWARE.COM



SECURITY AWARENESS TRAINING

If you ever had any doubts about how important (and complicated) IT security is, here are just a few of the processes and technologies invented to keep you and your data safe:

Unified Threat Management. Patch management. Vulnerability management. Web filters. Spam filters. Domain authentication. Email encryption. Data loss prevention. Next-Gen Firewalls. Next-Gen Anti-Malware. Intrusion Detection/Prevention. SSL Inspection. Security Information and Event Management...

Okay, you get the point.

When properly implemented, these controls are a great start to protecting your technology infrastructure and company assets. However, it might not stop Bob in Dispatch from purchasing \$2,000 worth of iTunes gift cards. It may not prevent a bad actor from hijacking an unencrypted and unsigned email conversation and redirecting a customer's wire payment, either.

These were real and recent situations we've helped some customers respond to and help others defend against, but low-tech scams like these remain highly effective, and today's bad actors are getting better, more convincing and far more impactful than yesterday's princes and heirs.

Despite ever-increasing budgets and overall strengthening of cyber-resilience, without modern security awareness training, one of the greatest but most at-risk resources—your people—remain vulnerable.

We recommend working with a dedicated platform such as KnowBe4 to keep your employees and colleagues informed and engaged. As a KnowBe4 partner, Source One Technology can quickly and effectively help you implement modern security awareness training for your organization.

Periodic reminders are great. Ongoing training is better. Don't let inadequate security awareness training knock your SOCs off.

Website:

KNOWBE4.COM

Customizing Spiceworks forms

A helpdesk ticketing system is synonymous with an optimal running network. It's the interface between your team and the end-users. If your helpdesk ticket form is too general, it can create a lot of unnecessary work for you and your crew.

Ask yourself, how many times does your team need to call back users to get additional information? How many times have you asked the question - did you try restarting your computer? Let's face it, asking users to fill out a form with a "detailed description" is not going to cut it.

Most helpdesk systems give you the ability to modify or create bespoke ticketing forms, and one popular helpdesk system is Spiceworks. Best of all, it only takes a few minutes to customize.

Website:

[SPICEWORKS.COM](http://spiceworks.com)

Support:

[COMMUNITY.SPICEWORKS.COM](http://community.spiceworks.com)

01

Log in to Spiceworks, and navigate to **[User Portal]** then to **[Design the User Portal]**

02

Once you are in the designer mode of the Spiceworks user portal, navigate to **[Manage Content]** upper right button, then select **[Custom Ticket Form]**.

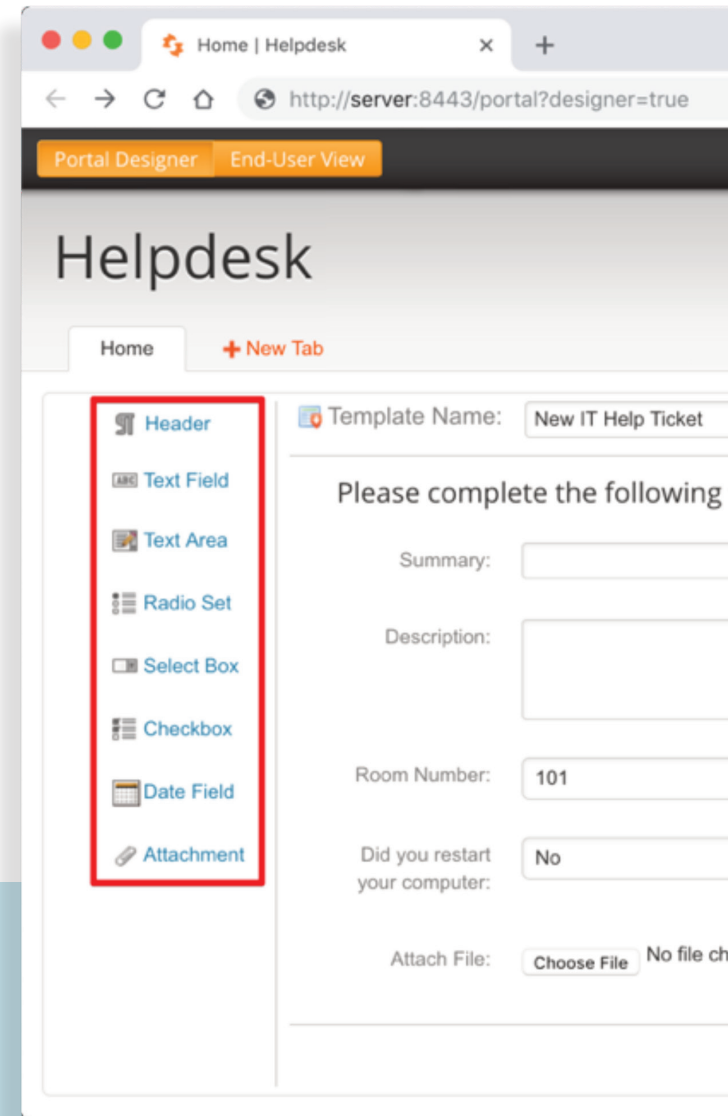
03

At this point, customize the form for your environment, save it and test it

04

Finally remove the default Spiceworks form from the home page.

In just a few minutes, your IT team has become more efficient!



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Disabling basic authentication in Office 365.

Microsoft recently released a public preview of a new Exchange Online feature that allows you to disable Basic Authentication. Why should you care about this?

Keeping Basic Authentication enabled makes you susceptible to brute force or password spray attacks since Basic Authentication only requires a username and password. Bad actors are creating automated processes (i.e. Bots) using Basic Authentication to **break into** Exchange Online accounts.

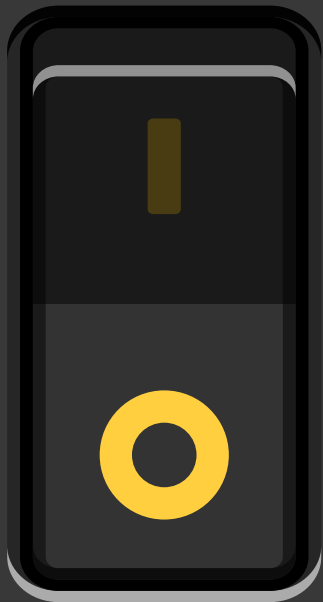
We recently saw this attack in action at a client who was experiencing a large number of account lockouts even after enabling Multi-Factor Authentication (MFA). The attack was stopped after disabling Basic Authentication.

What do you need to do?

- Enable Modern authentication for your Office 365 tenant (this may be enabled already).
- Create a Disable Basic Authentication Policy in Exchange PowerShell and assign it to your users.

Key points:

- Outlook version 2013 (with registry fix) and later is required. Outlook 2010 will not work.
- Outlook 2016 for Mac and later is required.
- iPhone email client IOS version 11.3.1 and higher is required.
- Android email clients will not work. Android users should use the Outlook App



NAS - it does more than you think!

Many NAS now allow you to run Active Directory, DNS, DHCP, Office 365/G Suite backup, have built-in anti-malware and crypto-malware detection, Dropbox-like anywhere personal and team file synchronization with web-based live co-editing, and VPNs in appliances that are only a couple hundred dollars without monthly recurring costs.

They can even run non-critical virtual machines directly on the NAS for those functions that they cannot perform natively.

These appliances, such as those created by Synology and QNAP, are designed to offer file sharing without special firewall rules or significant technical expertise and their core functions typically support all major desktop and mobile platforms with technical support for up to five years. To protect your files and applications on the Synology select the offsite storage provider of your choice, paying only whatever the offsite provider requires for storage fees.



These appliances can help bring the core features of some of the best of cloud platforms to an on-premise appliance for environments that do not want a traditional server but have not moved to the cloud due to the recurring fees, internet performance, or concerns about data privacy.

Synology website:

[SYNOLOGY.COM/EN-US/DSM](https://www.synology.com/en-us/dsm)

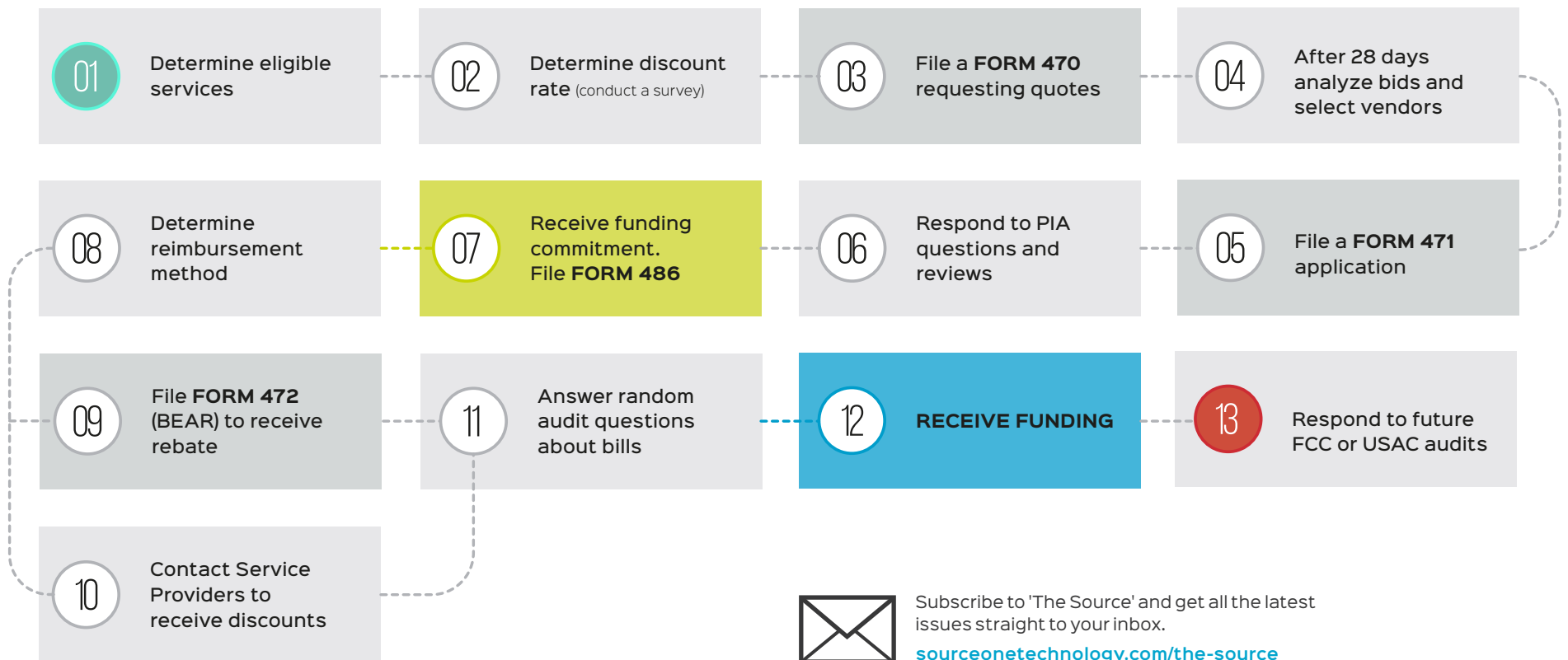
QNAP website:

[QNAP.COM/STATIC/LANDING/USENG/SERIES/GETSTARTED/SMB/](https://www.qnap.com/static/landing/useng/series/getstarted/smb/)

SHOW. ME. THE MONEY!

E-Rate application process

For schools looking to take advantage of E-Rate funding, the process can be quite daunting. Thanks to help from E-Rate experts, New Hope Foundation, we've highlighted the steps to help you stay on top of the process.



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The vast improvements in recent years to the stability, security, and performance of our network is largely the result of the tenacity and expertise of Source One Technology. Our department now has the time to concentrate on improving the educational technology experiences for our staff and students.

Zac Pawlowski
DIRECTOR OF TECHNOLOGY
SIENA CATHOLIC SCHOOLS

See what our customers are saying about us
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