BACKUP AND RECOVERY OPTIONS IN OFFICE 365

By Nathan O'Bryan

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Based on a Fireside Chat with Nathan O'Bryan, MVP: Office Servers & Services MCSM: Messaging, and Joseph Ochs, Team Lead: Enterprise Sales Engineer Backupify

D uring a recent Fireside Chat, Nathan O'Bryan, MVP: Office Servers & Services MCSM: Messaging, and Joseph Ochs, Team Lead: Enterprise Sales Engineer Backupify, took a deep dive into the backup and recovery options organizations have with Office 365. It's a multi-faceted problem where expert guidance and third-party solutions can be very helpful. Here are some of the key questions that need to be asked and the answers from the experts on the Fireside Chat.

QUESTION: Does Microsoft back up data in Office 365?

Joseph Ochs: When we talk about backups in Office 365, we're going to cover a couple of different concepts. The first thing I want to focus on is what Microsoft is doing with Office 365 providing backups of the infrastructure, and the accessible applications. They are providing backups of the servers, the infrastructure, software that houses the data but not necessarily the data itself. Now, in a way you could definitely argue that by having a backup of the server itself, you have a backup of the data on the server. At the same time, though, it comes down to if Microsoft is going to give you access to that backup. Ultimately the answer is typically no. They have that in reserve in case something happens and it either goes up in flames or a server fails, software gets corrupted, they have it so that they can make sure the application itself

remains accessible, but it's not truly a backup in that it's not going to give you recovery options.

Nathan O'Bryan: Yes. There are a lot of things you want to consider when you're thinking about backups and Office 365. The first one is that Office 365 isn't one thing. There isn't an Office 365 server somewhere. Office 365 is a huge collection of services including Azure Active Directory and Exchange Online and SharePoint Online. There's a ton of applications and types of data and Office 365 is a bunch of things. First of all, when we talk about does Office 365 backup your data, well, there's a lot of different data and different formats. So it's not one answer. Going into that a little further, Microsoft's responsibility is to ensure that Microsoft's service and Microsoft's products are there and if Microsoft has a problem, they can recover from that

problem. If Microsoft's server blows up that's not going to affect your ability to get into the service. If you delete an email your boss sent you and then in three months you decide you want that email back, Microsoft doesn't feel any responsibility to help you recover that. So, does Microsoft backup the data in Office 365? It's really a big question and there's a lot to it. You need to think about what kind of data you're talking about specifically and what sort of scenarios you're looking for to get that data back.

need to be concerned about. Microsoft has a very good system for that. Every mailbox has at least four copies in at least two data centers with one that's a lag copy, or copy that runs some period of time behind the standard live copy of your database. The lag copy is there if there's an issue of logical corruption. Microsoft can recover to a point in time before that. But Microsoft very explicitly states that they're not going to go in and restore that lagged copy of your database just because you ask for it. That's

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QUESTION: How does Microsoft protect the data in Office 365 against disaster?

Nathan O'Bryan: So, again Office 365 is a lot of things. If we look at Exchange itself, Microsoft has a number of different ways they protect Office 365 data or that Exchange Online data against some disasters. But again it's not necessarily all disasters. For instance, if Godzilla attacks one of the Microsoft data centers, your Exchange Online data is in at least one other data center. There is no way that one of Microsoft's data centers being completely crushed is going to lose your data. Your mailbox will almost instantly be online in another data center in that region. So that's not something that we

not part of the deal if you look at the Office 365 service description. They're only going to do that in the event they have a problem that they detect and they need to roll that back.

Moving on to SharePoint, there are some backups that are done within SharePoint for Microsoft and if you look at the service description there, you can request backups to be restored within SharePoint. But it's very specific to site collection level. You have to have the entire site collection. It's very limited set of time that's available for. There's protection there within Office 365 but it's important to go very carefully through the service agreement for Office 365 and

understand what Microsoft does and doesn't cover for you and what sort of situation you can use that recovery for.

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Joseph Ochs: It also comes down to the definition of disaster. For some organizations that I've worked with, disaster is: "Hey, we're in Florida and we get hammered by hurricanes once a year or twice a year." The disaster they're thinking of is a natural disaster and in that case, part of the Office 365 availability model is high availability. If a data center blows up, there's a second data center that houses all of that same data, so you as an end user wouldn't notice any difference in coverage. But when we talk about other types of disasters, let's call them techno-logical disasters, someone infected with ransomware or some sort of corruption, that's not something that Microsoft plans for but it's definitely something that's really important. If you as a user do some-thing that affects your data, you aren't going to be able to request access to it from Microsoft.

QUESTION: **What scenarios does Microsoft Exchange Native data protection protect against?**

Nathan O'Bryan: Exchange native data protection is really Microsoft's name for the collection of technologies that they've put together within Exchange. They feel this protection renders the need for tradi-tional point in time backups unnecessary, at least while within Office 365 and Microsoft servers. The collection of features like transport databases, lag databases, single item recovery, possibly legal hold. So, Exchange native data protection is really a collection of technologies that protects against the failures that Microsoft in Office 365 and Exchange Online is taking responsibility for, things like that data center level incident or a hard drive failing in a server. All that is protected. What Exchange Native data protection is not designed for, though, is as Joseph said earlier, it's not designed for things that users do. Within Office 365 and the servers, I think Microsoft's philosophy is if you delete your data, well, you did that on purpose and that data should be gone.

Joseph Ochs: I think you hit the nail on the head right there. When we look at what Microsoft is doing, they're not look-ing at every transaction a user does and they are not saying is this something that seems intentional or accidental. If I click the delete button, it's going to take that as I intended to hit the delete button. So, one of the ways we always talk about the protections that Microsoft offers, we look at the different systems and the different responsibilities organizations have. As a

customer of Microsoft's you're responsible for managing how you are going to interact and how you are going to protect yourself against things like human coding errors, malicious insiders, hackers, viruses, malwares, things like that. What kind of controls do you have in place to protect yourself from your users whereas Microsoft provides protection against the more standard disaster scenarios of servers blowing up, software failing, and natural disasters. They provide you with additional functionality in terms of compliance and storage and things of that nature but not

QUESTION: What scenarios does Microsoft strategy not protect against?

Joseph Ochs: One of my favorite concepts in working with Microsoft is their terminology of this concept called the shared responsibility model. The shared responsibility model is that Microsoft is responsible for the security of the cloud and you the customer are responsible for security within the cloud. In other words, again, Microsoft's responsibility is going to be focused on the hardware and software side, preventing actual disasters from affecting your data set and things

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really focused around that level protection. This expands too, beyond Exchange it also covers OneDrive and SharePoint. But no matter how many confirmation dialog boxes pop up, if you say yes, delete an item, Microsoft is going to take that as a literal command to delete this item and they are not going to ask the question, was this intentional or not. So, that's really important to note that while there are certain protections in place, retention policies you can configure, second-stage recycle bins, if a user wants to get rid of data, Microsoft is not going to stop them.

like that. That's one of the reasons organizations move to the cloud. They don't want to have to continue to maintain databases. They don't want to have to maintain server infrastructure. You are reducing overhead. Microsoft is taking on that overhead on your behalf. What doesn't change is your responsibility for protecting yourself from the ever constant threat of your users. Microsoft isn't responsible to protect you from those end users. They're not here to protect you from that delete button. They're not here to protect you from a user's ignorance or malice. They're here to protect you from

losing your data as a result of something in their data center going down. What the shared responsibility model comes down to is Microsoft taking the most expensive piece on themselves but still requiring you to do at least something for it.

responsibility for everything. There is that shared responsibility model and I think that's a good thing for us.

QUESTION: How can Backupify help with each of these scenarios?

"BACKUPIFY PROVIDES COMPANIES WITH PEACE OF MIND THAT THEIR DATA IS TRULY PROTECTED FROM HARDWARE FAILURES, SOFTWARE FAILURES, NATURAL DISASTERS, AND OUTAGES ON THE MICROSOFT SIDE." —JOSEPH OCHS

Nathan O'Bryan: This isn't necessarily a bad thing for us as IT professionals. I've been moving organizations into Office 365 since day one. Early in the Office 365 days I'd get a lot of questions from administrators within companies that were migrating into Office 365: "Does this mean I'm going to have a job next year? Is Office 365 going to replace me?" The answer to that is no, absolutely not. If your pure job is to replace hard drives and servers, or to watch little blinking lights, yeah then, Office 365 is going to replace you. That's what it's there for. But if you as an IT professional keep yourself trained and you understand the service and you understand the changes to the service and how you can help your organization use the service properly, then I think there is no reason to think that migration to Office 365 is going to replace the need for real live IT pros in the organization to manage this service. Microsoft isn't taking

Joseph Ochs: Essentially Backupify provides companies with peace of mind that their data is truly protected from the hardware failures, software failures, natural disasters, and outages on the Microsoft side but also they have a solution in place that's going to allow them to prevent their businesses from having any downtime. They will be able to easily recover their data. We do this in several ways.

First, Backupify creates an independent second copy. We follow the three-two-one rule: three versions of the data, two different locations, one offsite. We take your data and move it out of the Microsoft cloud and we store it in a separate location. We actually have two separate locations per region. At the end of the day we want to make it easy for companies to maintain their data in the same exact way that they would on premises, in a second independent copy.

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The second thing we provide is easy access to do restores. Everybody knows that a backup can be just as complex as a live server environment. You don't want to have to dedicate hours, days, weeks of time learning a solution that's literally the same exact copy of your data. So, we build an interface that's very, very simple to go in, navigate through the data, the same exact way you would interact with it in the live environment and ultimately be able to get it back.

Third, we provide granular and point in time recovery options. At the end of the day with the cloud, again we're not worried as much about hardware failure. With the cloud, the possibility of the data loss being widespread is pretty limited. I've been in this world since 2014. I've dealt with probably 3,000 organizations. In that time, the number of companies that have actually had widespread data loss I could probably count on two hands. More often than not the recovery models we're seeing are I need one email, or I

need one OneDrive document from five days ago. So, what we're going to do is provide you with the opportunity to recover at a granular level. It's not going to be a site collection recovery like you would get with SharePoint Online. It's that one document within the document library within the site collection.

So, those three things are really where Backupify is able to help and provide coverage for those scenarios that Microsoft doesn't cover.

Find out how Backupify can help protect your Office 365 data.

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