An aerial view of a city skyline at sunset. The sky is a mix of orange, yellow, and blue. The city buildings are silhouetted against the bright sun. A semi-transparent dark box is overlaid on the left side of the image, containing the title text.

# New Research: Top 5 Data Protection Gaps in Office 365



# Speakers

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**Michael D. Osterman**  
*President, Osterman Research, Inc.*

Michael Osterman founded Osterman Research in 2001. Since then, the company has become one of the leading analyst firms in the messaging and collaboration space, providing research, analysis, white papers, and other services to companies like Microsoft, America Online, IBM, Google, HP, and many others. The core of Osterman Research's capabilities is its market research panel of IT professionals and end users that are regularly surveyed on a variety of topics related to email, instant messaging, spam, collaboration, security, storage, archiving, data retention, compliance, and many other areas. This continually updated knowledge base of information from decision makers and influencers helps Osterman Research to understand developments and gain insight into the trends that affect its clients.



**W. Curtis Preston**  
*Chief Technologist, Druva*

W. Curtis Preston is known as “Mr. Backup,” having specialized in backup and recovery for 25 years. He started his career as the backup admin for a \$35B credit card company, and has since designed and implemented some of the world's largest backup systems, including dozens of Fortune 500 companies. His passion for protecting everyone's data includes founding backupcentral.com, writing the O'Reilly books *Backup & Recovery* and *Using SANs & NAS*, conducting several hundred backup seminars around the world, as well as speaking at hundreds of webinars and trade shows.

# ABOUT US

- Focused on the messaging, Web, and collaboration industries.
- Practice areas include archiving, security, encryption, content management, etc.
- Strong emphasis on primary research conducted with decision makers and influencers.
- Founded in 2001.
- Based near Seattle, Washington.



# AN IMPORTANT DISCLAIMER

- Osterman Research is of the opinion that Office 365 is a sound offering from a solid vendor.
- It offers a wide range of useful and important features.
- If you're using Office 365, you should continue to do so; if you're not, you should seriously consider doing so.
- But...
  - Like any mass-market offering, Office 365 has some limitations.
  - It cannot be all things to all customers.
  - Many/most Office 365 customers will benefit from the use of third-party solutions from specialist providers that offer better functionality than what Office 365 provides natively.

# SOME DISCONNECTS: SECURITY

- Office 365 offers two security services: Exchange Online Protection and Advanced Threat Protection (ATP).
  - ATP is the more powerful option
- But...
  - ATP is only available in E5 or as an extra-cost add-on
  - There is no consolidated view of threats – admins must manually correlate what is happening across the organization.
  - The spam quarantine has some limitations.
  - Ransomware protection is good, but not complete.

# THE “3-2-1 RULE”

- The 3-2-1 rule is an essential best practice for data protection:
  - It applies to any endpoint: desktop computer, laptop, server, cloud repository, etc.
- You should have at least **three** copies of your data.
- These copies should be stored on **two** different platforms and/or media types.
- You should keep **one** copy at a remote location.

# SOME DISCONNECTS: DATA PROTECTION

- Protection from deleted data in Office 365 requires proactive work by admins
  - Adjusting retention periods of Recycle Bin/Deleted Items, or
  - Use of Microsoft's new Retention Policies, which come with 25 pages of documentation
  - Use of Microsoft's new Retention Lock, which protects against malicious admins or malware
- The native capabilities to protect data use Office 365 itself to provide this protection, a violation of the "3-2-1 Rule".
- Plus, the data protection offered within the Office 365 platform is not uniform across the various components in the platform.
- Microsoft offers no SLA recovery, and their TOS recommends using third-party backup services

# SOME DISCONNECTS: EXCHANGE

- Exchange Online
  - It is not possible to restore a user to a point in time:
    - For example, if a .PST import has taken place, just the imported emails cannot be removed.
    - A user restore to a point before the .PST was imported is not possible.
  - Restored emails go to Inbox, not original folder



# SOME DISCONNECTS: ONEDRIVE

- OneDrive
  - Retained versions count against your storage allocation
  - Can require purchasing more storage
  - Can restore deleted files or entire OneDrive account, nothing in-between (e.g. subfolders)
  - Site recovery “nuclear option”
    - Can only done by support
    - Restores entire site collection in-place, deleting new data
    - Takes hours to days
    - No SLA for recovery

# SOME DISCONNECTS: LONG-TERM ARCHIVAL

- SharePoint content cannot be archived to alternative and cheaper storage systems.
- Auto-expanding mailboxes in Office 365 automatically creates new storage for the archive:
  - There is no additional charge for this capability.
  - But content can be searched only within these folders, not across them.
- Folders may get moved and a subfolder, akin to a stub, is created.
- To access items in an auto-expanded archive, the user has to use Outlook 2016/2019 for Windows/Mac or OWA.
- Outlook 2013 cannot access content that is moved to additional archive storage.

# OTHER CONSIDERATIONS

- Hybrid environments present several challenges:
  - Because on-premises Exchange and Office 365 are managed differently, simple tasks may require complex scripting.
  - IT staff don't have full visibility into how Office 365 is managed, resulting in potential problems with data protection.
  - Microsoft's Directory Sync from Active Directory to Azure Active Directory is not a complete solution.
- Most organizations maintain mixed Microsoft and non-Microsoft environments:
  - Microsoft does not support non-Microsoft solutions as well as it supports its own.
  - We anticipate that mixed environments will continue to be the norm, particularly in larger organizations.

# REGULATORY ISSUES TO CONSIDER

- Creating a legal hold is a complicated, multi-screen process
- Legal hold notification alerts, reminders and escalation are supported in Office 365:
  - But these capabilities are not available in the base eDiscovery capability in Plan E3.
  - The new version of Advanced eDiscovery requires Plan E5 or the Advanced add-on.
- Office 365 has the ability to provide basic compliance capabilities around subject access requests and supporting right-to-be-forgotten obligations, but this requires IT-centric processes.
- There is no way to delete any emails that are subject to a retention-locked retention period, including those that are subject to a "right-to-be-forgotten" request from GDPR or the CCPA:
  - If a retention lock has been established it cannot be changed in the future.
  - For new emails, the retention period can be changed, but only by establishing a new policy and deactivating the old one.

# OTHER ISSUES TO CONSIDER

- Microsoft does not offer a Service Level Agreement (SLA) for Content Search or an eDiscovery search.
- Separate retention, preservation and disposition policies cannot be created for a user's mailbox and their Online Archive.
- If a user is on legal hold, their deleted email will not automatically be moved to an archive folder:
  - That content is placed in the “dumpster”.
  - If the dumpster reaches capacity, it must be moved manually to an archive folder or be subject to another retention policy.

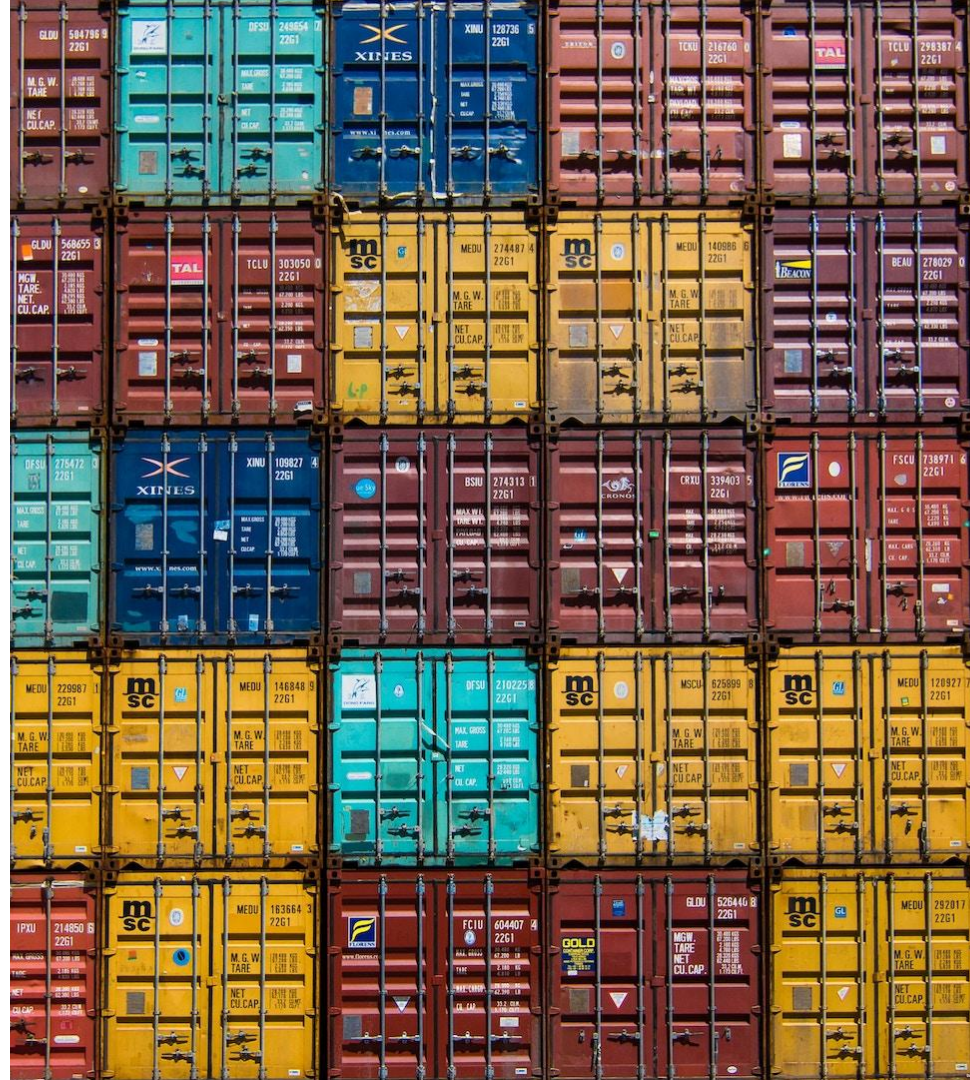
# DUE DILIGENCE

- Moving to Office 365 is typically a top-down decision.
- Stakeholders often are not consulted.
- Knowledge is at a high level only in most cases.
- Getting “into the weeds” is a laborious and time-consuming process.



# LIMITATIONS

- Office 365 is a solid platform, but it relies on itself to protect customer data.
- Storing all data in the same place, or with the same provider, is not a best practice.
- Using multiple and independent data repositories is an essential element of data protection.



# COST ANALYSIS

Do an accurate cost analysis of the cost of Office 365 and third-party supplementary or replacement solutions.

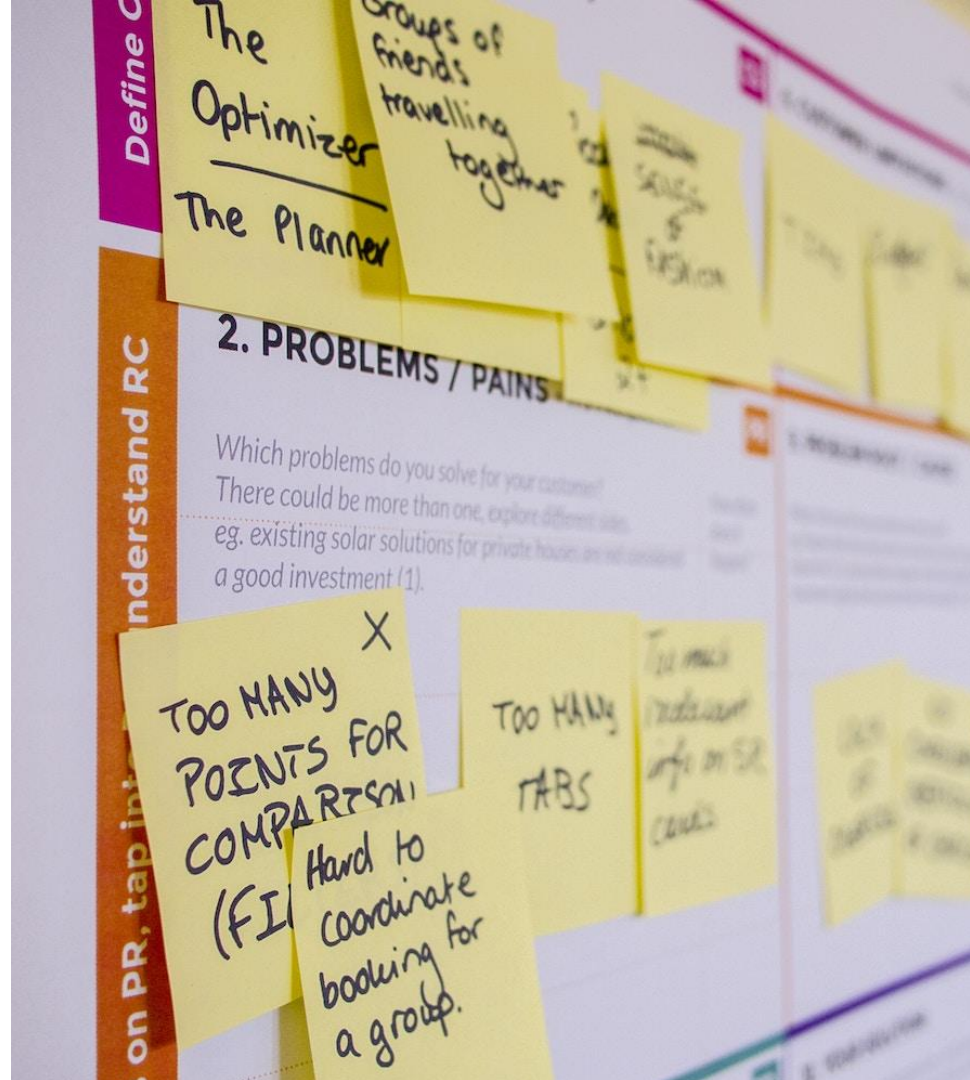
You may find that using lower level Enterprise plans plus third-party solutions will be less expensive than the “full meal deal” from Microsoft.





# SUMMARY

- Office 365 is a solid platform.
- But it cannot be all things to all customers.
- Data protection in Office 365 has some gaps that can result in various compliance problems.
- Third-party solutions should be used to address the limitations in Office 365.






**Complete Protection and Governance for End-User Data**



“ **With Druva** we gained data visibility while reducing costs and complexity, simplifying and reinforcing our entire data protection strategy.”

Brian Bagwell, Director of IT 

**4,000+**

Enterprise  
Customers

**100PB+**

Data Under  
Management

**Top 5**

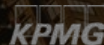
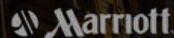
Amazon Storage  
Partner

**10%**

Fortune 500  
Companies



servicenow



SIEMENS



xerox



Booz | Allen | Hamilton

Continental

# End-User Data Protection and Governance



# Office 365 Data Protection

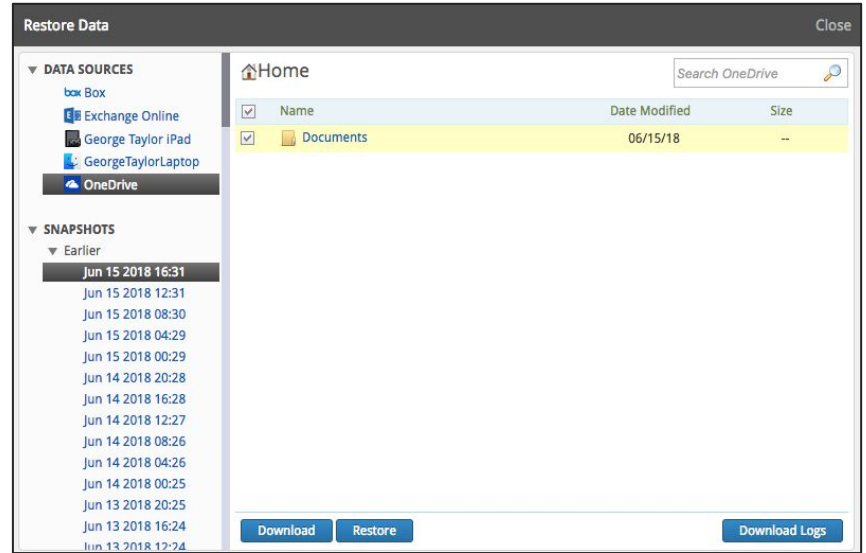
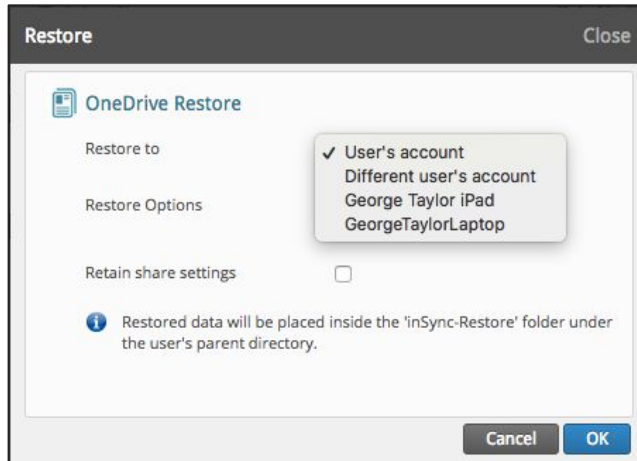
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- Cloud-to-cloud backup via API connectors
  - No impact to network bandwidth
- Easy access and on-demand recovery of data
  - In cases of accidental deletion or malware attack
  - Flexible restore options
- Archive data for as long as it's needed
  - Compliance or litigation
  - Exiting employees
- View and manage all end-user data through a single dashboard



# Flexible Restore Options

- Restore in place or as a copy
- Restore to original location, device or download
- User able to access backed up data from any device



# One-Click User Preservation

The screenshot shows the inSync user management interface for George Taylor. The top navigation bar includes 'inSync', 'Availability', 'Governance', 'Users', 'Data Sources', 'Profiles', 'Manage', and 'Reports'. The main content area is titled 'Backup Overview > George Taylor' and is divided into three columns: Summary, DLP Summary, and Activities.

**Summary:** A progress bar is shown at the top. Below it, '4.71 MB Device Backup Data' and '3.36 GB (0%) Device Usage (% Quota)' are listed. At the bottom, '3.36 GB Share Data' and '16.60 MB Cloud Apps Backup Data' are listed.

**DLP Summary:** Shows '2 Devices Traced' next to a world map with a blue dot indicating the user's location.

**Activities:** Lists recent backup events: 'Exchange Online Backed up 8 days ago', 'OneDrive Backed up 61 days ago', 'GeorgeTaylor.Laptop Backed up 204 days ago', and 'Box Backed up 379 days ago'.

Below the summary is a tabbed interface with 'Summary' selected. The 'User Summary' tab shows a table of user details:

Name	George Taylor
Email ID	george.taylor@druva-demo.com
Profile	O365 CloudApps
Storage	Druva Demo_US_West
CloudCache	--
User quota	No Limit
User Status	Active - On legal hold
Added On	May 04 2017, 05:54

An 'Edit' button is located at the bottom right of the User Summary tab.

The 'Profile Settings' tab shows various configuration options:

- Allow users to add devices:  Enabled
- Max. devices: 4
- DLP:  Device Trace,  Auto Delete,  Encryption
- Privacy settings:  Enabled
- Mobile access:  Enabled
- Mobile backup/DLP:  Mandatory
- Cloud Apps:  box,  Box,  Office 365,  OneDrive,  Exchange Online,  G Suite,  Google Drive,  Gmail

At the bottom of the interface, there is a row of action buttons: 'Restore', 'Activate User', 'Preserve User', 'Delete User', and 'More'. The 'Preserve User' button is highlighted with a red circle.

# In-Place Legal Holds

- Preserve data across all end-user sources for legal or compliance purposes
- Data held in-place with no need to export
- Capture forensic metadata
  - Extended set of EDRM defined attributes
- Ensure legal admissibility
  - File signatures
  - Chain of custody reporting
  - Auditing of users & admins
- Data ingestion to eDiscovery platform
  - Secure WebDAV data access
  - Download utility

Create Legal Hold Close

Legal Hold Summary Validate & Add users Data Access Using WebDAV

Legal Hold Summary

Legal Hold Name

Add users to legal hold

*Enter email ids separated by commas*

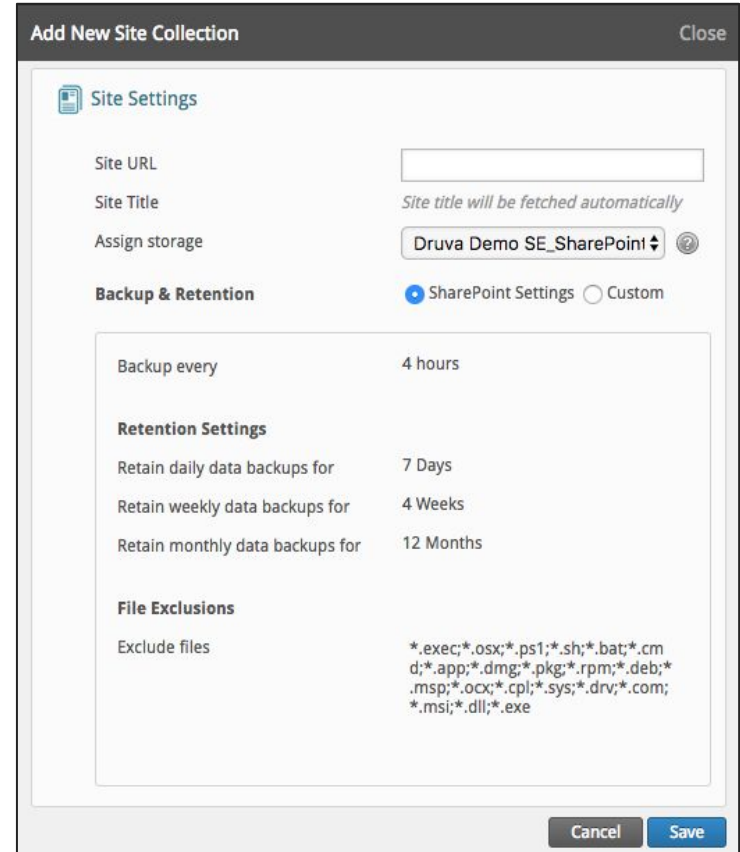
You can add more users from the details page later.

Cancel Next



# SharePoint Online Data Protection

- Backup every 4 hours or manually at any time
- Entire site and **granular object-level restore**: Restore only the data you need
- Flexible restore location: original site, copy within site collection or download the data
- Restore immediately – no need to wait weeks or call Microsoft
- Storage selected per site collection to support data residency needs
- Sites can be manually added or auto-discovered



The screenshot shows the 'Add New Site Collection' dialog box with the following settings:

- Site Settings**
  - Site URL: [Empty text box]
  - Site Title: *Site title will be fetched automatically*
  - Assign storage: Druva Demo SE\_SharePoint (with a help icon)
- Backup & Retention**
  - Selected:  SharePoint Settings,  Custom
  - Backup every: 4 hours
  - Retention Settings**
    - Retain daily data backups for: 7 Days
    - Retain weekly data backups for: 4 Weeks
    - Retain monthly data backups for: 12 Months
  - File Exclusions**
    - Exclude files: \*.exec;\*.osx;\*.ps1;\*.sh;\*.bat;\*.cmd;\*.app;\*.dmg;\*.pkg;\*.rpm;\*.deb;\*.msp;\*.ocx;\*.cpl;\*.sys;\*.drv;\*.com;\*.msi;\*.dll;\*.exe

Buttons: Cancel, Save

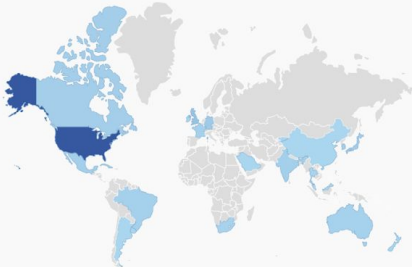
# Unified Dashboard to Protect and Govern All End-User Data

## Dashboard Data last updated on 09:30:47 PM

Search by user name, email

### Users & Data Sources

- 8714** / 8835 Users Active / Licensed
- 9065** / 9196 Devices Enabled / Cloud Apps Enabled
- 12** Legal Hold Policies / 49 Custodians
- 4** Compliance Policies / 5 Users



- 9192** Devices Traced
- 186** Encrypted
- 0** Auto Delete Enabled

### Data Utilization

**37.00 TB** / 90.00 TB Total Usage

4.29 GB Usage per User

- US East: 43%
- US West: 33%
- APJ Sales: 11%
- EMEA Sales: 11%
- Product Market...: 2%
- Others: ~0%

Profiles | File Types | Data Source

### Backup & Restore Status

9057 Windows / 7 Mac OS / 1 iOS

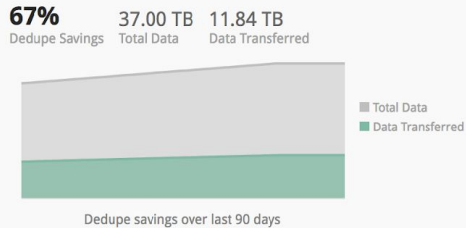
**9038** Backed Up Successfully

- Backup Failed: 2
- Backed Up With Errors: 0
- Inactive: 25
- Never Backed Up: 0

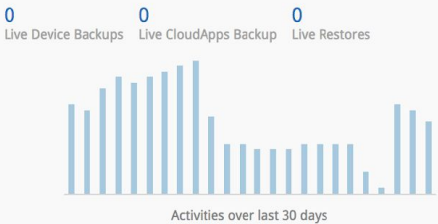
Total Restores (till date) : 205

Devices | Box, G Suite & O365 | SharePoint

### Dedupe Savings



### Activities



# Workforce Software Closes the Office 365 Protection Gaps

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## Challenges:

- Constant worries of critical data loss from gaps in Office 365
- Lack of central visibility and control
- Rising infrastructure costs and manual effort to meet demands
- Concerns about regional controls to address compliance issues

## Results with Druva:

- Unified data protection for Office 365 and endpoint data for all global offices
- Centralized visibility and management of all end-user data, for alignment with regional privacy requirements



**workforce**  
SOFTWARE

# Key Takeaways

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Close the Office 365 data protection gaps with a unified solution and:

- Ensure Office 365 data is protected from user error or malware, and available on-demand
- Unify all end-user data in a single repository for better compliance and eDiscovery enablement
- Meet data retention requirements as required by regulation or organization

# Questions?


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## DRUVA RESOURCES

- Learn more about [Druva inSync](#)
- Request a [Product Demo](#)
- Start a [Free Trial](#)
- Contact: [sales@druva.com](mailto:sales@druva.com) or +1-800-375-0160

## OSTERMAN RESOURCES

- Learn more about [Osterman Research, Inc.](#)
- [Read the blog](#)
- [Follow on Twitter](#)
- Contact: [info@ostermanresearch.com](mailto:info@ostermanresearch.com) or +1-206-683-5683

An aerial view of a city skyline at sunset. The sky is a mix of orange, yellow, and blue. A large, semi-transparent graphic overlay, consisting of several overlapping curved shapes, is positioned on the right side of the image. The city buildings are illuminated with warm lights, and a body of water is visible in the distance.

Thank you

