

6 Ways to Get Insights on your Microsoft 365 usage

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Agenda





Reporting and Analytics

Why

DLP and
governance

Measure
communication
effectiveness

Adoption

Licence
management

Troubleshooting

What

Users

Workloads

Content

Time

Devices

Reporting vs Analytics



Ref: <https://whitepages.unlimitedviz.com/2017/02/difference-reporting-analytics-42/>

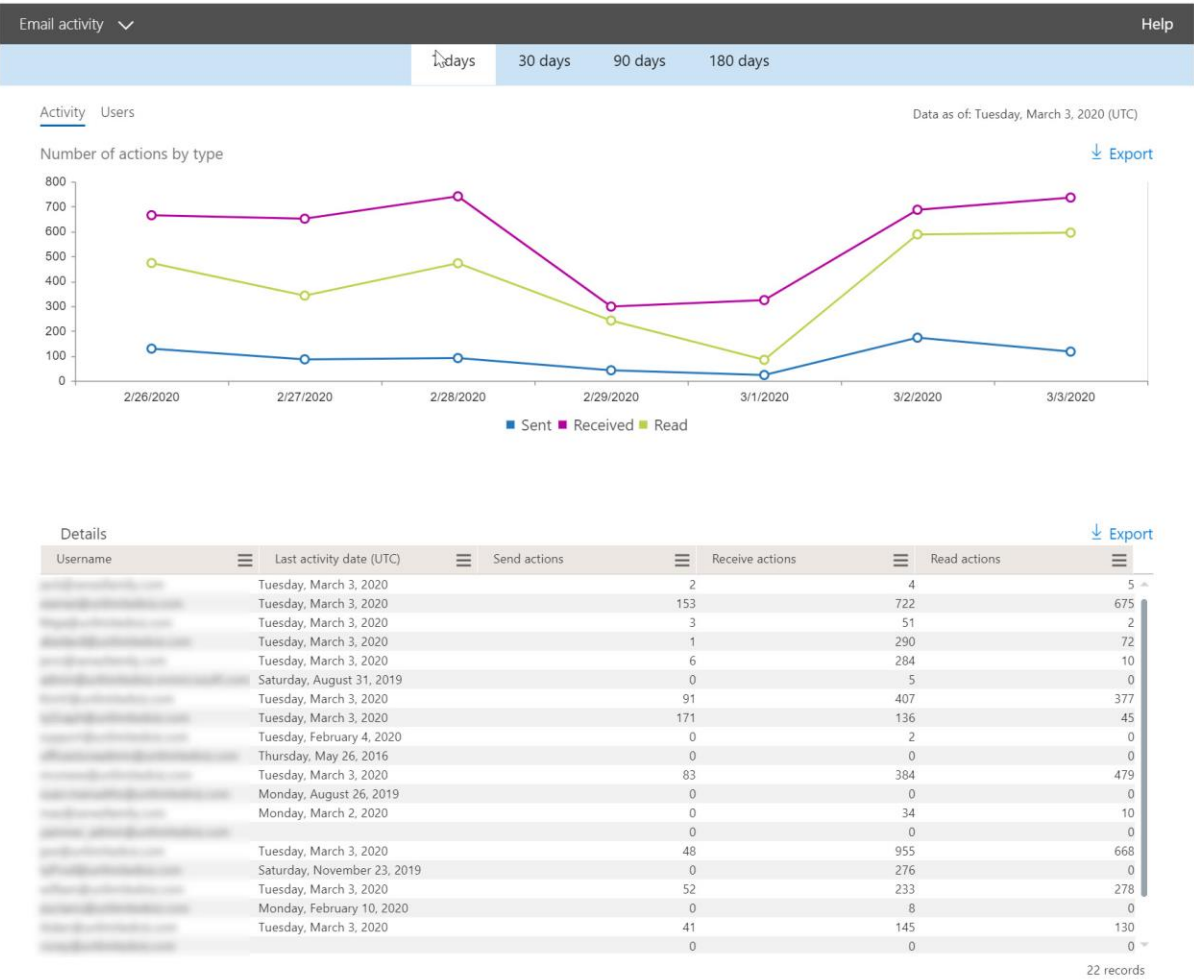


#1 Microsoft 365 Administration Portal

Workloads

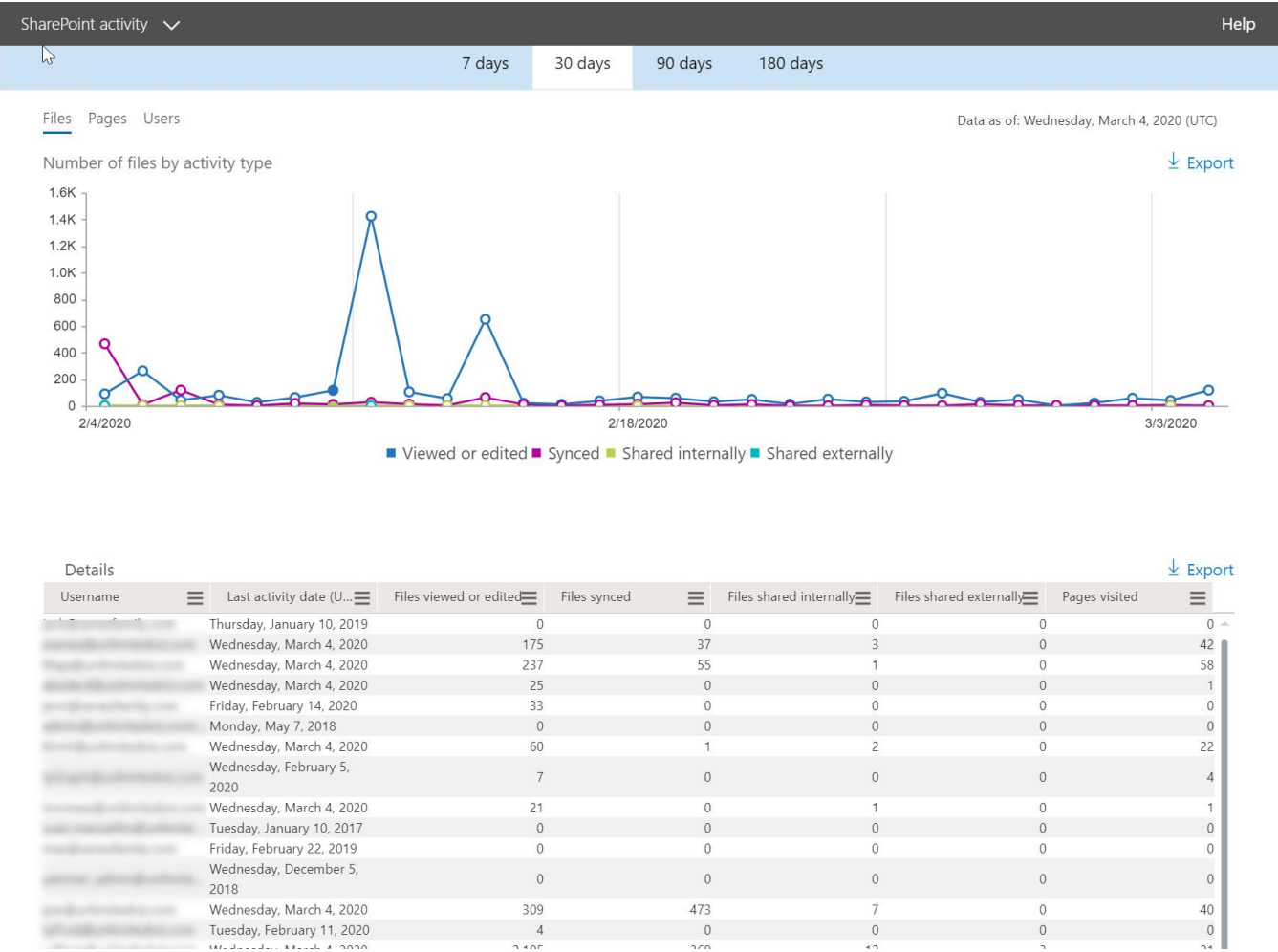


Email



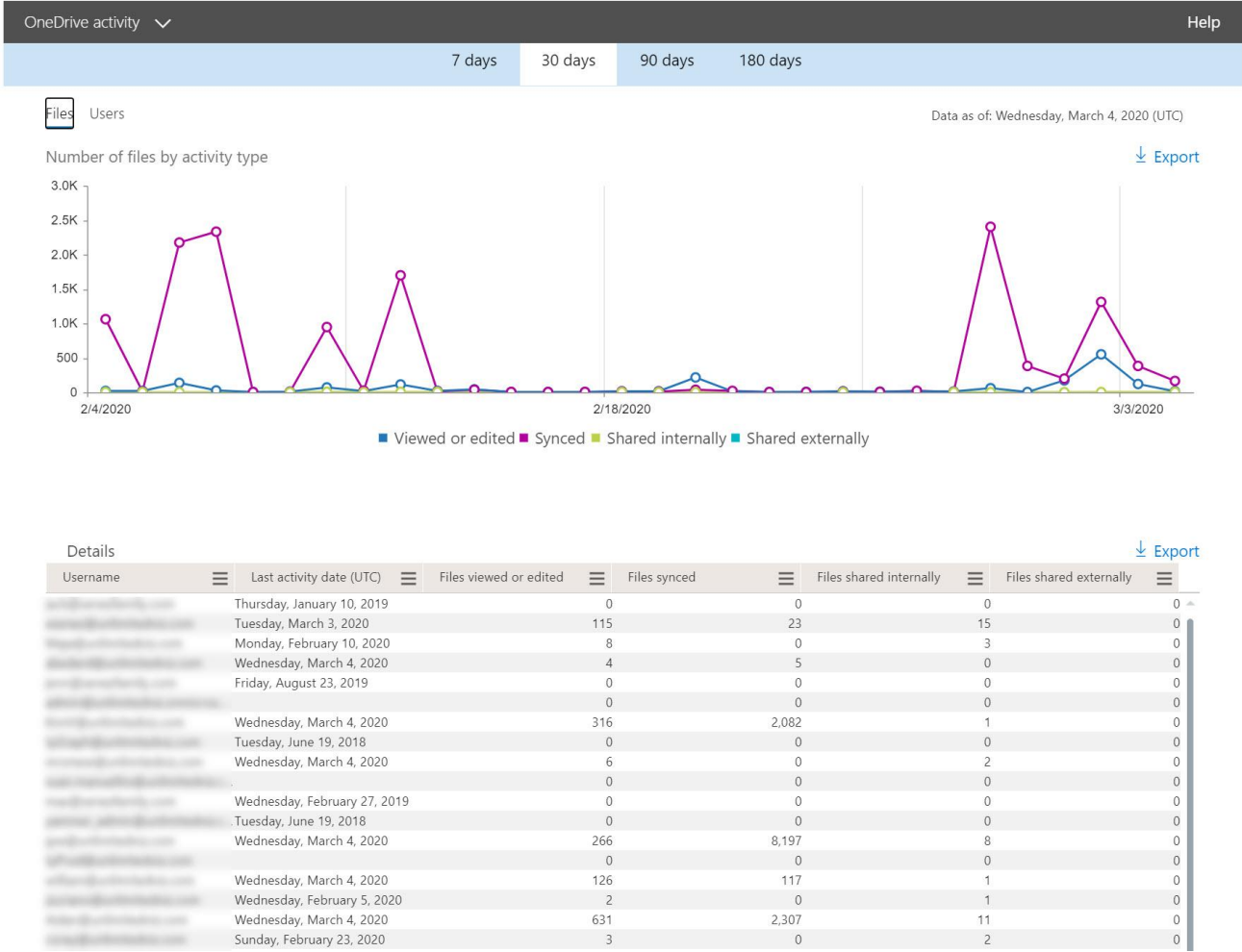
- Exchange ▾
 - Email activity
 - Email app usage
 - Mailbox usage
- Microsoft Teams ▾
- Office 365 ▾
- OneDrive ▾
- SharePoint ▾
- Skype for Business ▾
- Yammer ▾

SharePoint



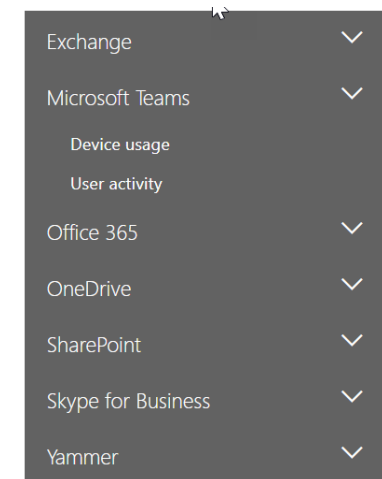
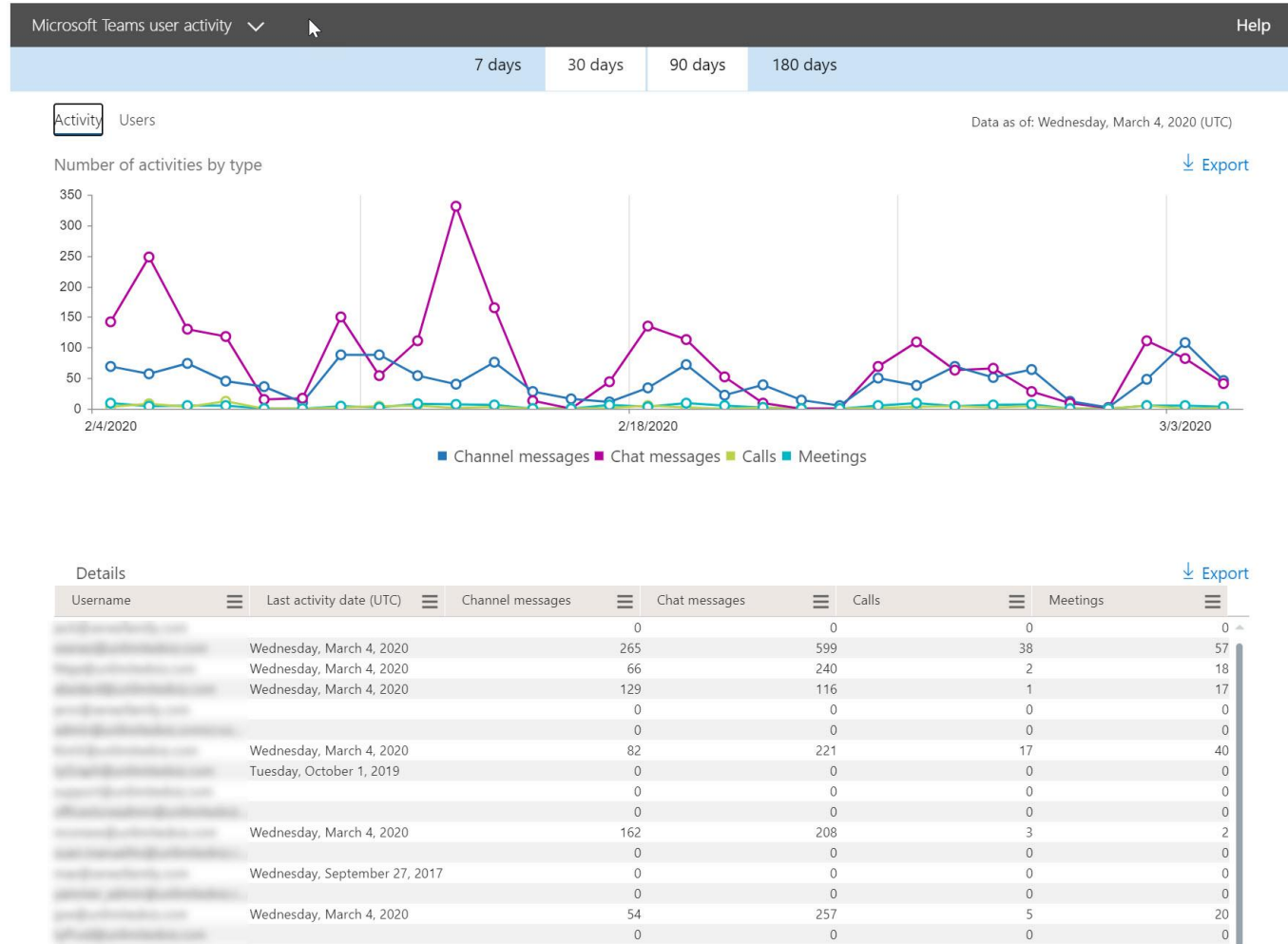
- Exchange ▾
- Microsoft Teams ▾
- Office 365 ▾
- OneDrive ▾
- SharePoint ▾
 - Activity
 - Site usage
- Skype for Business ▾
- Yammer ▾

OneDrive



- Exchange ▼
- Microsoft Teams ▼
- Office 365 ▼
- OneDrive ▼
- Activity ▼
- Usage ▼
- SharePoint ▼
- Skype for Business ▼
- Yammer ▼

Teams



Others

Office 365

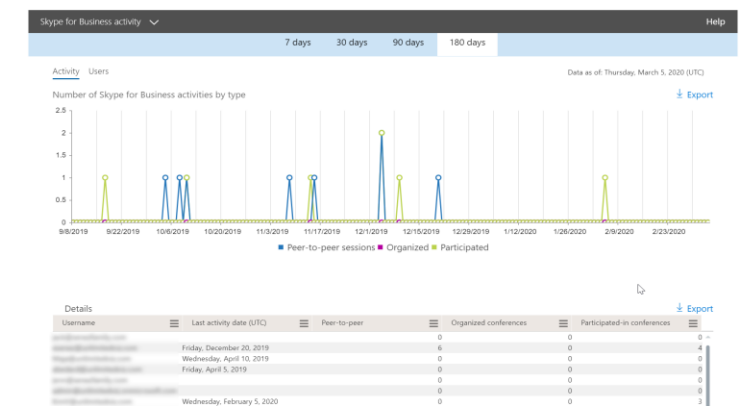
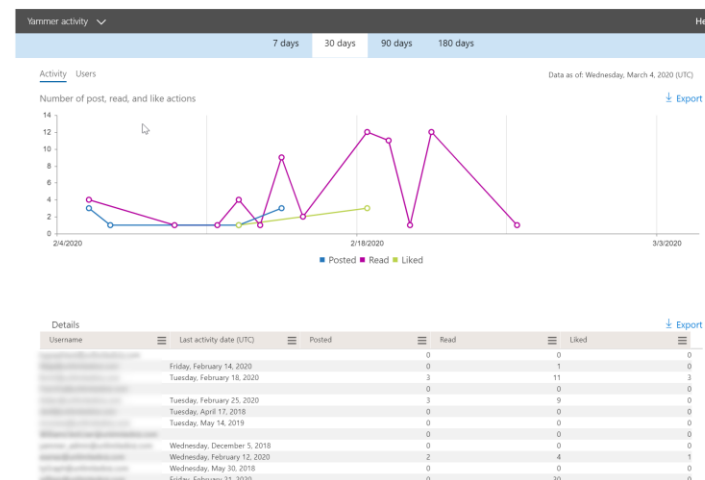
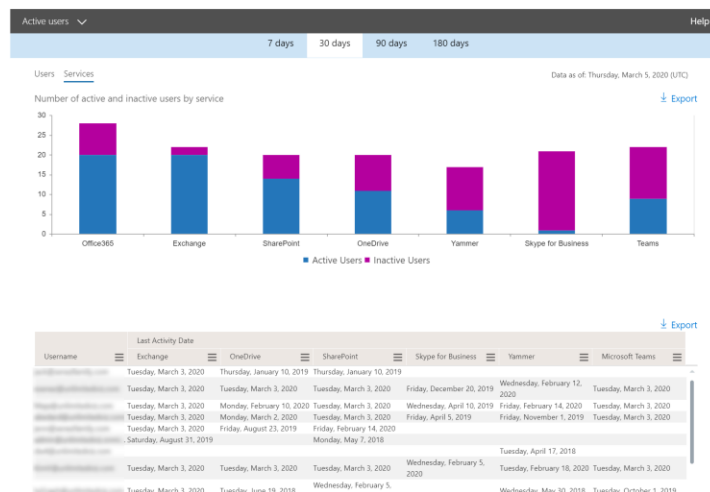
Activations
Active users
Groups activity
Multi-geo distribution

Yammer

Activity
Device usage
Groups activity

Skype for Business

Activity
Conference organizer activity
Conference participant activity
Device usage
Peer-to-peer activity
PSTN usage
Users blocked



Time intelligence

7 days

30 days

90 days

180 days

> 180 days
purged

Day level
granularity in
charts

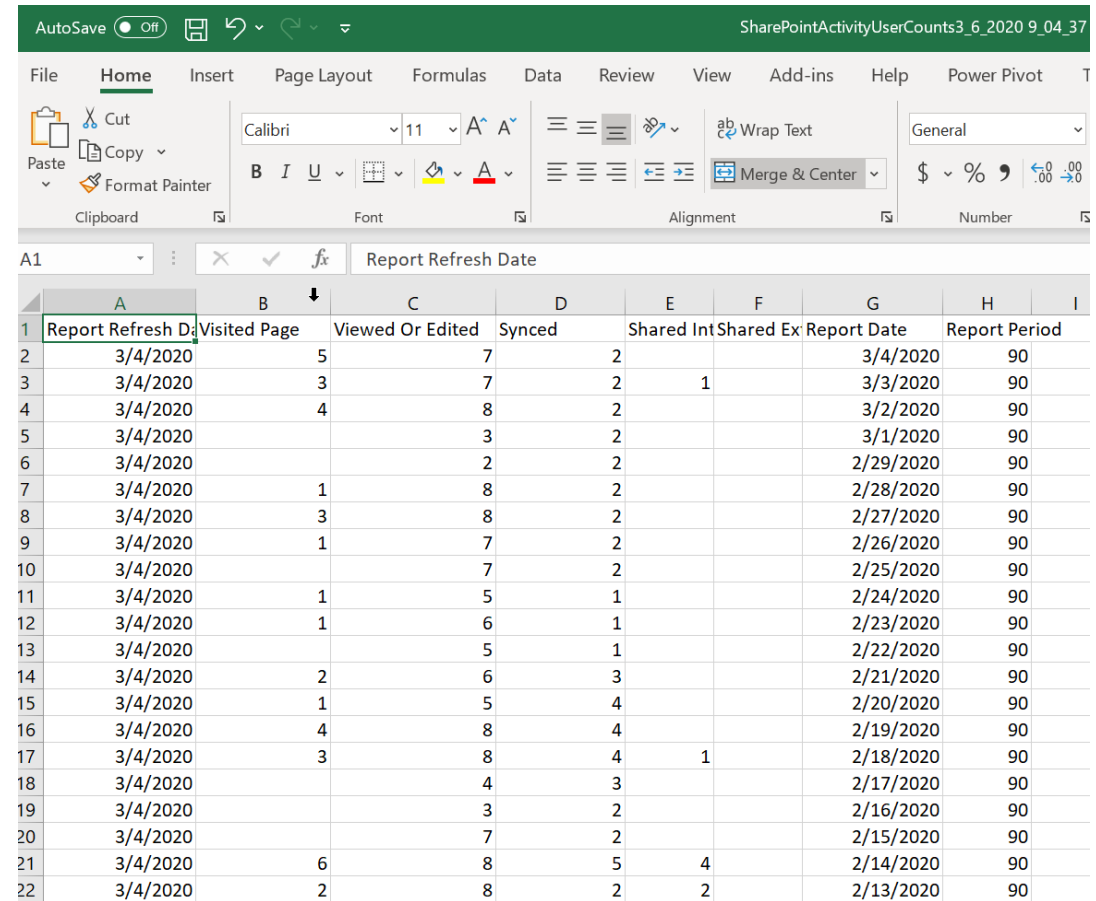
Export

CSV

What you see
is what you
get

No user data
exported

Report
periods
limited



	A	B	C	D	E	F	G	H	I
	Report Refresh Date	Visited Page	Viewed Or Edited	Synced	Shared Int	Shared Ex	Report Date	Report Period	
2	3/4/2020	5	7	2			3/4/2020	90	
3	3/4/2020	3	7	2	1		3/3/2020	90	
4	3/4/2020	4	8	2			3/2/2020	90	
5	3/4/2020		3	2			3/1/2020	90	
6	3/4/2020		2	2			2/29/2020	90	
7	3/4/2020	1	8	2			2/28/2020	90	
8	3/4/2020	3	8	2			2/27/2020	90	
9	3/4/2020	1	7	2			2/26/2020	90	
10	3/4/2020		7	2			2/25/2020	90	
11	3/4/2020	1	5	1			2/24/2020	90	
12	3/4/2020	1	6	1			2/23/2020	90	
13	3/4/2020		5	1			2/22/2020	90	
14	3/4/2020	2	6	3			2/21/2020	90	
15	3/4/2020	1	5	4			2/20/2020	90	
16	3/4/2020	4	8	4			2/19/2020	90	
17	3/4/2020	3	8	4	1		2/18/2020	90	
18	3/4/2020		4	3			2/17/2020	90	
19	3/4/2020		3	2			2/16/2020	90	
20	3/4/2020		7	2			2/15/2020	90	
21	3/4/2020	6	8	5	4		2/14/2020	90	
22	3/4/2020	2	8	2	2		2/13/2020	90	

#2 - Microsoft 365 Usage Analytics App



Power BI Template App

Requires Pro
license or
Premium

Dataset owner
must have
"Reporting" role

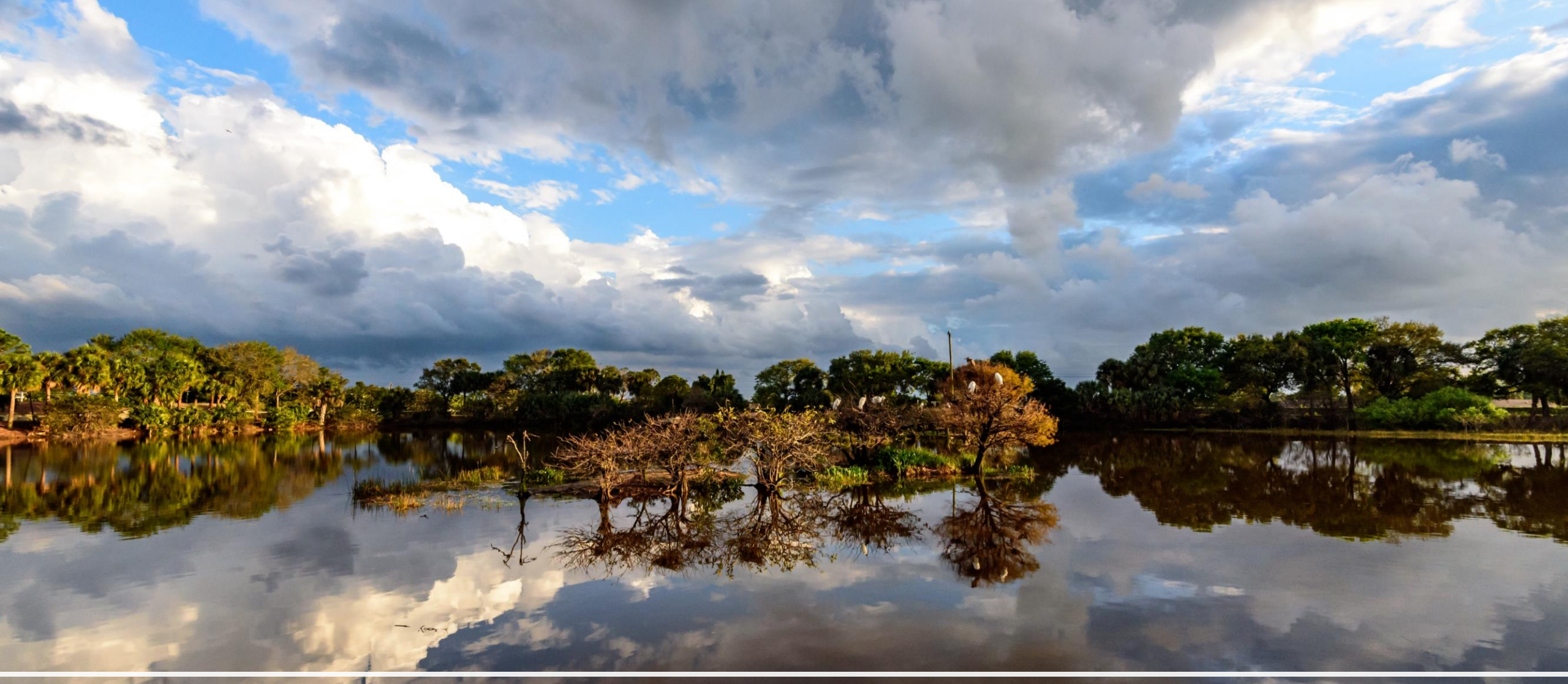
Access can be
granted to non-
admin users

Source data
updated daily

More reporting
than analytics

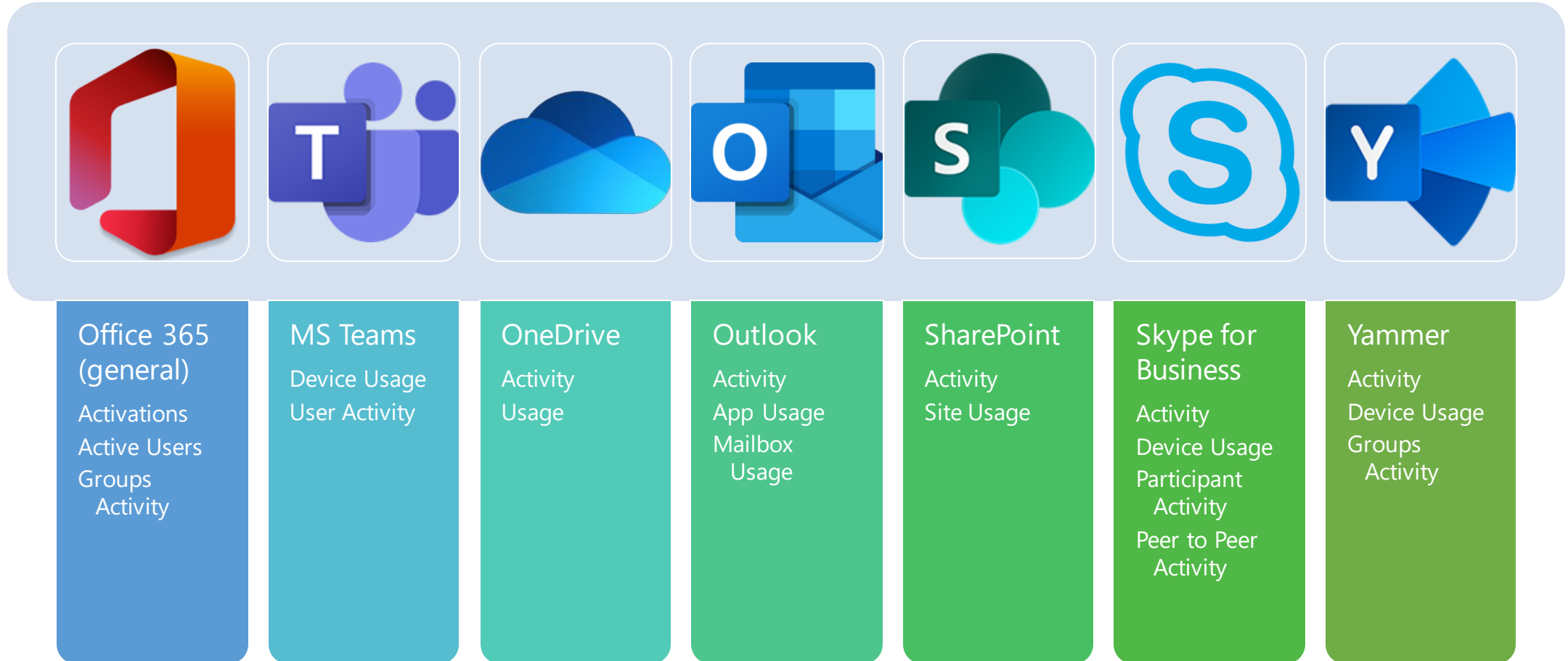
Demo

Microsoft 365 Usage Analytics App



#3 - Reporting APIs

Workloads



<https://docs.microsoft.com/en-us/graph/api/resources/report?view=graph-rest-1.0>

Output

Report Refresh	User Principal Name	Last Active	Is Deleted	Deleted Date	Assigned To	Team	Channel	Private Channel	Call Count	Meeting Count	Has Other	Report Period
4/22/2020			FALSE		OFFICE 36		0	0	0	0	No	7
4/22/2020			FALSE		OFFICE 36		79	61	4	21	Yes	7
4/22/2020			FALSE		OFFICE 36		38	100	3	9	Yes	7
4/22/2020			FALSE		INTUNE+P		126	80	0	4	Yes	7
4/22/2020			FALSE		OFFICE 36		0	0	0	0	No	7
4/22/2020			FALSE		OFFICE 36		0	0	0	0	No	7
4/22/2020			FALSE		MICROSOFT		106	51	2	11	Yes	7
4/22/2020			FALSE		POWER BI		0	0	0	0	No	7
4/22/2020			FALSE		OFFICE 36		0	0	0	0	No	7
4/22/2020			FALSE		OFFICE 36		0	0	0	0	No	7
4/22/2020			FALSE		MICROSOFT		133	37	2	9	Yes	7
4/22/2020			FALSE		OFFICE 36		0	0	0	0	No	7
4/22/2020			FALSE		MICROSOFT		0	0	0	0	No	7
4/22/2020			FALSE		OFFICE 36		0	0	0	0	No	7
4/22/2020			FALSE		PROJECT F		56	28	3	13	Yes	7
4/22/2020			FALSE		MICROSOFT		0	0	0	0	No	7
4/22/2020			FALSE		PROJECT C		193	144	3	20	Yes	7
4/22/2020			FALSE		OFFICE 36		109	106	0	10	Yes	7
4/22/2020			FALSE		OFFICE 36		0	0	0	0	No	7
4/22/2020			FALSE		POWER BI		0	0	0	0	No	7
4/22/2020			FALSE		OFFICE 36		0	0	0	0	No	7

[https://graph.microsoft.com/v1.0/reports/getTeamsUserActivityUserDetail\(period='D7'\)](https://graph.microsoft.com/v1.0/reports/getTeamsUserActivityUserDetail(period='D7'))

[illegible]

[https://graph.microsoft.com/v1.0/reports/getTeamsUserActivityUserDetail\(date=2020-04-22\)](https://graph.microsoft.com/v1.0/reports/getTeamsUserActivityUserDetail(date=2020-04-22))

<https://link.tygraph.com/m365insights>



Granularity and latency

Day level aggregations

Past 30 days

Period aggregations

7 day
30 day
90 day
180 day

Latency

1 day
2 day
1 week
Depends on
the endpoint



#4 – Unified Audit Log

Compliance Center Audit log search

The screenshot shows the Office 365 Security & Compliance Center interface. The left sidebar contains navigation options: Home, Alerts, Permissions, Classification, Data loss prevention, Records management, Information governance, Supervision, Threat management, Mail flow, Data privacy, Search, Content search, and Audit log search (highlighted with a red box). The main content area is titled 'Audit log search' and includes a search bar, a 'Clear' button, and a 'Results' section. Below the search bar, there is a table of activities with columns for Date, IP address, User, and Action. The table lists various file and page activities, such as 'Accessed file', 'Checked in file', 'Checked out file', 'Deleted file', 'Detected document sensitivity mismatch', 'Modified file', 'Recycled all versions of file', 'Restored file', 'View signaled by client', 'Changed compliance policy label', 'Changed record status to locked', 'Copied file', 'Deleted file from recycle bin', 'Deleted file from second-stage recycle bin', 'Detected malware in file', 'Moved file', 'Recycled version of file', 'Uploaded file', 'Performed search query', 'Deleted Record Compliance policy label', 'Changed record status to unlocked', 'Discarded file checkout', 'Downloaded file', 'Recycled all minor versions of file', 'Renamed file', and 'Viewed page'. Below the table, there are two buttons: '+ New alert policy' and '+ New audit retention policy'.

<https://protection.office.com/unifiedauditlog>

Compliance Center Audit log search

<

Home

Alerts

Permissions

Classification

Data loss prevention

Records management

Information governance

Supervision

Threat management

Mail flow

Data privacy

Search

Content search

Audit log search

Home > Audit log search

Audit log search

Need to find out if a user deleted a document or if an admin reset someone's password? Search the Office 365 audit log to find out what the users and admins in your organization have been doing. You'll be able to find activity related to email, groups, documents, permissions, directory services, and much mo

Search

Clear

Activities

Show results for all activities

Start date

2020-04-17

00:00

End date

2020-04-25

00:00

Users

Show results for all users

File, folder, or site

Add all or part of a file name, folder name, or URL

Search

New alert policy

New audit retention policy

Results 150 results found (More items available, scroll down to see more.)

Date	IP address	User	Activity	Item
2020-04-24 09:34:39	[65.93.28.129]:25377		Moved messages to another folder	
2020-04-24 09:33:48	[173.238.128.146]:41107		Created mailbox item	
2020-04-24 09:32:57	[65.93.28.129]:6929		Moved messages to another folder	
2020-04-24 09:32:26	[2607:fea8:6c40:152f:ed92:57b5:7b84:414f]:45805		Moved messages to Deleted Items folder	
2020-04-24 09:32:24	[2607:fea8:6c40:152f:ed92:57b5:7b84:414f]:8962		Moved messages to Deleted Items folder	
2020-04-24 09:31:38	[2607:fea8:6c40:152f:9d0c:14e8:93c4:c6f3]:9116		Updated message	
2020-04-24 09:31:37	[2607:fea8:6c40:152f:9d0c:14e8:93c4:c6f3]:49956		Moved messages to another folder	
2020-04-24 09:31:25	[70.50.179.236]:40571		Moved messages to Deleted Items folder	
2020-04-24 09:30:26			User signed in to Teams	Unknown (Unknown)
2020-04-24 09:30:26			User signed in to Teams	Unknown (Unknown)
2020-04-24 09:29:35	[65.93.28.129]:47655		Moved messages to another folder	
2020-04-24 09:29:29	[65.93.28.129]:39095		Moved messages to Deleted Items folder	

<https://protection.office.com/unifiedauditlog>

<https://link.tygraph.com/m365insights>

tyGraph

Granularity and Retention

Must be enabled (for now)

Transactional level

90 day retention by default

7day retention for API access

Org Policy can increase to 1 year

SharePoint
Exchange
Azure Active Directory

<https://docs.microsoft.com/en-us/microsoft-365/compliance/audit-log-retention-policies>

Latency

Microsoft 365 service	30 minutes	24 hours
Advanced Threat Protection and Threat Intelligence	X	
Azure Active Directory (user login events)		X
Azure Active Directory (admin events)		X
Data Loss Prevention	X	
Dynamics 365 CRM		X
eDiscovery	X	
Exchange Online	X	
Microsoft Power Automate		X
Microsoft Project	X	
Microsoft Stream	X	
Microsoft Teams	X	
Power Apps		X
Power BI	X	
Security & Compliance Center	X	
SharePoint Online and OneDrive for Business	X	
Sway		X
Workplace Analytics	X	
Yammer		X
Microsoft Forms	X	

Access Mechanisms

Audit log
search

PowerShell

Management
APIs

Demo

Compliance Center – Audit Log Search



#5 - Microsoft Graph and Graph Data Connect

Graph Explorer

Microsoft

Microsoft Graph

Solutions

Graph Explorer

Getting Started

Docs

API Reference

Resources

Programs

Graph Explorer

Preview

Authentication

John P White

jpw@unlimitedviz.com

modify permissions

sign out

Sample Queries

Getting Started

GET

my profile

GET

my photo

GET

my mail

GET

all the items in my drive

GET

items trending around me

GET

my manager

show more samples

History

GET

/v1.0/me/drive/root/children

200

a minute ago

3438 ms

GET

/v1.0/reports/getTeamsUserActivityCounts(period...

200

3 hours ago

464 ms

GET

/v1.0/reports/getTeamsUserActivityCounts(period...

200

3 hours ago

718 ms

GET

/v1.0/me/GET /reports/getTeamsUserActivityCou...

400

3 hours ago

66 ms

show more

GET

v1.0

https://graph.microsoft.com/v1.0/me/

Request Body

Request Headers

When you use the Microsoft Graph API, you agree to the Microsoft Graph Terms of Use

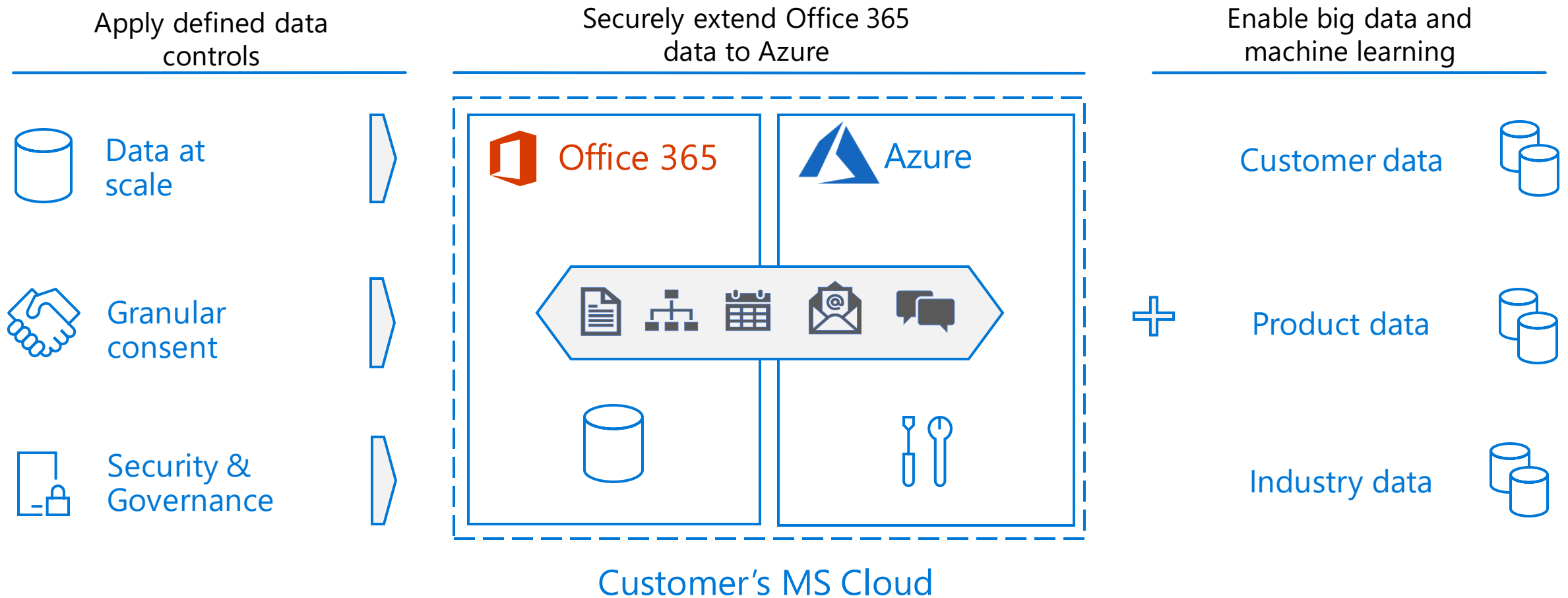
View the Microsoft Graph Terms of Use

View the Microsoft Privacy Statement.

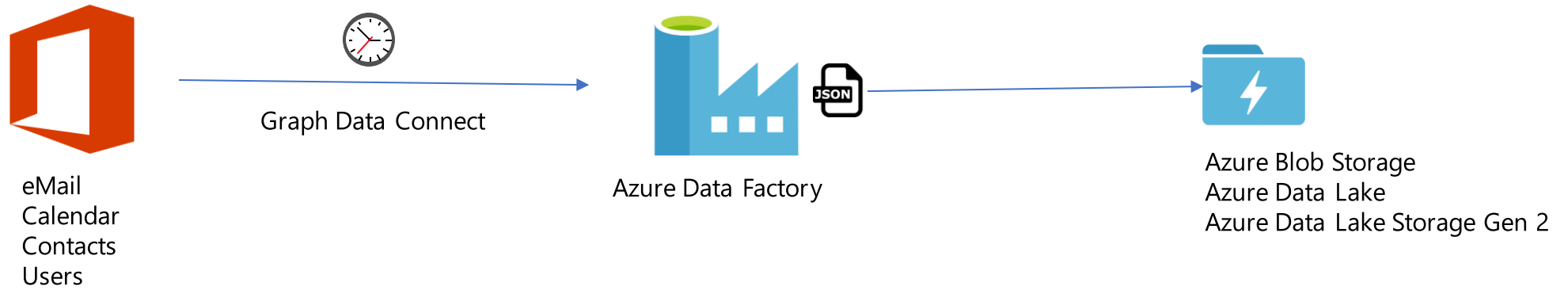
Response Preview

Response Headers

Microsoft Graph Data Connect



Complete Solution – tyGraph for Exchange



Demo

Graph Explorer

#6 - Third
Party
Products

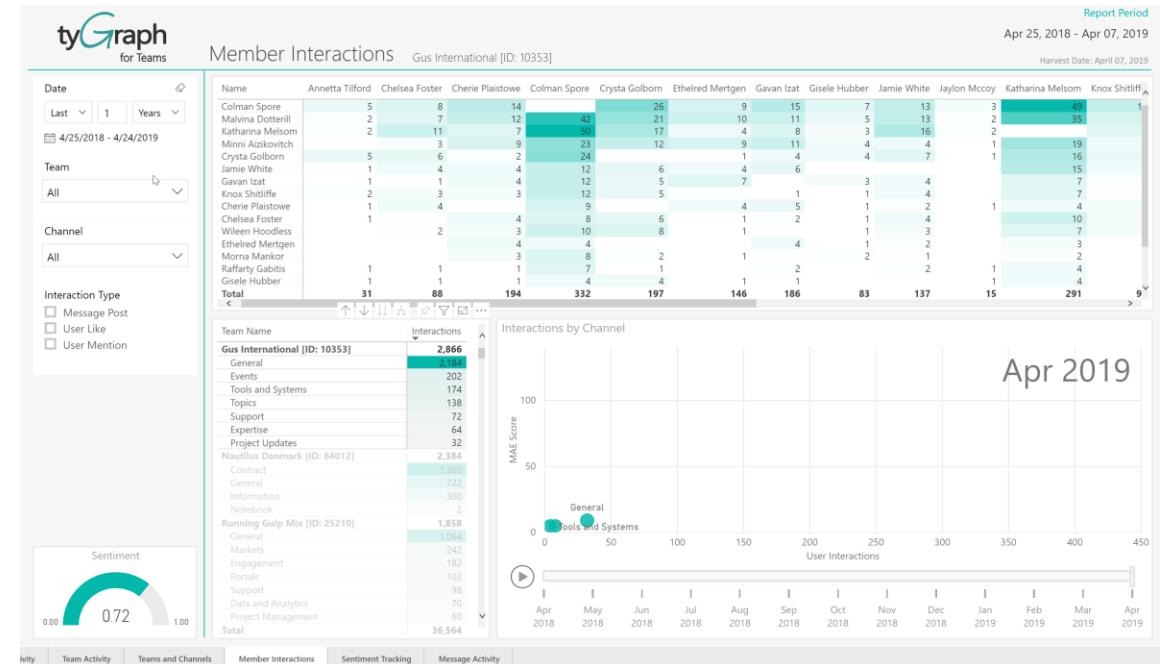


Third Party Tools

Page
Injection

Wiretapping

Warehousing





Wrapping up

In Closing

Understand
the need

Understand
the audience

Complexity vs
flexibility
tradeoff

Understand
retention

Q&A

ANSWER DESK	
RATE SCHEDULE	
Answer	\$1.00
ANSWERS WHICH	
Require Thought	\$2.00
Correct Answers	\$4.00
Dumb Looks	FREE

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