
netskope
CLOUD REPORT
OCTOBER
2014

REPORT HIGHLIGHTS

- Organizations have 579 cloud apps in use on average, 88.7% of which aren't enterprise-ready
- More than one-third of all cloud data leakage policy violations occur on mobile devices
- For every upload to cloud software development apps, there are three downloads
- 21 percent of data uploaded to cloud business intelligence apps are in apps whose terms say the app vendor owns the data

In this quarterly Netskope Cloud Report™, we've compiled the most interesting trends on cloud app adoption and usage based on aggregated, anonymized data from the Netskope Active Platform.

A key theme this quarter is cloud app usage from mobile devices. Nearly half of all cloud app activities occur on mobile devices, with more than half of "send" and "approve" activities occurring on mobile. Beyond the activities themselves, a high number of activity-based policy violations occur on mobile devices, the highest of which is 59 percent of "download" violations. Moreover, more than one-third (34.0%) of all data leakage policy violations (violating a DLP profile such as personally-identifiable health information, payment card information, or "company confidential"), occur on mobile devices.

The average number of cloud apps in use per organization grew to 579 this quarter from 508 last quarter. 88.7 percent of those apps aren't enterprise-ready. Despite many IT professionals acknowledging that shadow IT is alive and well in their organizations, many continue to underestimate its magnitude, estimating about one-tenth of the number of cloud apps that Netskope discovers. In one enterprise, Netskope discovered nearly 3,000 apps in use.

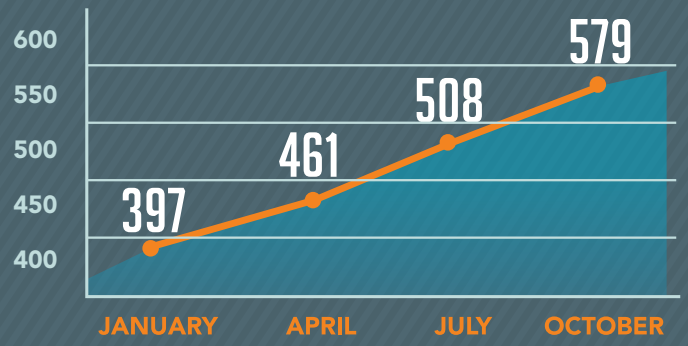
In addition to the consumer and prosumer apps that organizations expect to find in use, such as Twitter, Dropbox, and Evernote, line-of-business apps are actually the most prevalent. Marketing apps remain the most prevalent, followed by Collaboration, HR, Productivity, and Storage.

Report findings are based on tens of billions of cloud app events seen across millions of users and represent usage trends from July-September 2014.

CLOUD ADOPTION CONTINUES ITS CLIMB

Overall, enterprises using the Netskope Active Platform have an average of 579 cloud apps, up from 508 last quarter. 88.7 percent of those apps aren't enterprise-ready, scoring a "medium" or below in the Netskope Cloud Confidence Index™ [1] (CCI), an objective measure of cloud apps' security, auditability, and business continuity that has been adapted from the Cloud Security Alliance. In one enterprise, Netskope discovered nearly 3,000 apps in use. Talk about shadow IT!

The average number of cloud apps per enterprise continues its steady climb



This quarter, 88.7 percent of these cloud apps aren't enterprise-ready.

1 The Netskope Cloud Confidence Index is a database of thousands of cloud apps that are evaluated on 40+ objective enterprise-readiness criteria adapted from the Cloud Security Alliance, including security, auditability, and business continuity. The results of the evaluation are normalized to a 0–100 score and mapped to five levels ranging from "poor" to "excellent."

In addition to the consumer and prosumer apps that organizations expect to find in use, such as Twitter, Dropbox, and Evernote, line-of-business apps are actually the most prevalent. Marketing remains the most prevalent app, followed by Collaboration, Human Resources (HR), Productivity, and Storage. Below are the top 10 categories in terms of number of apps per enterprise. The vast majority of these apps are not enterprise-ready, with well over 90 percent of apps in categories like HR and Finance/Accounting rated a "medium" or below in the CCI.

# OF APPS PER ENTERPRISE	# PER ENTERPRISE	% THAT ARE NOT ENTERPRISE READY
Marketing	60	98%
Collaboration	38	84%
Human Resources	36	96%
Cloud Storage	31	77%
Productivity	31	90%
Finance/Accounting	29	98%
CRM/SFA	24	91%
Software Development	23	90%
Social	16	71%
Project and Program Management	15	69%

What are the top-used apps in the Netskope Active Platform? As in past quarters, Cloud Storage and Social apps dominate the top 20 and represent 50.2 percent of total usage in Netskope. Other categories represented in the top 20 include Collaboration, Call Center, Consumer, Customer Relationship Management/Salesforce Automation (CRM/SFA), Finance/Accounting, Infrastructure, Productivity, and Webmail. We define "usage" as number of distinct app sessions.[2]

	APP	CATEGORY		APP	CATEGORY
1	Google Drive	Storage	11	Salesforce	CRM and SFA
2	Facebook	Social	12	Box	Storage
3	Twitter	Social	13	Jive SBS	Collaboration
4	Google Gmail	Webmail	14	LivePerson	Call Center
5	YouTube	Social	15	Office365	Collaboration
6	LinkedIn	Social	16	Evernote	Productivity
7	Dropbox	Storage	17	Cisco Webex	Collaboration
8	Pinterest	Consumer	18	Amazon CloudDrive	Storage
9	Microsoft OneDrive	Storage	19	Concur	Finance/ Accounting
10	iCloud	Storage	20	Weibo	Social

2 A session is a distinct time period in which a user logs into an app, performs a series of activities, and then ceases to work in the app for a period of time. Existing usage metrics (e.g., HTTP sessions) are often inaccurate because users don't always log out following active usage. Netskope has developed a proprietary heuristic to measure a more accurate period of activity, which we define as a session. Usage is defined as number of discrete sessions.

MOBILE AND CLOUD: BFFs 4EVER

Mobile is an important way for enterprise users to get to their cloud apps. Whether it's an expense report approval on Concur, a quick search for a business contact on LinkedIn, or a "while-I'm-thinking-of-it" content share from a storage app, users are increasingly likely to log into into mobile devices to get to cloud apps.

Ten cloud apps enterprise users are most likely to access from a mobile device

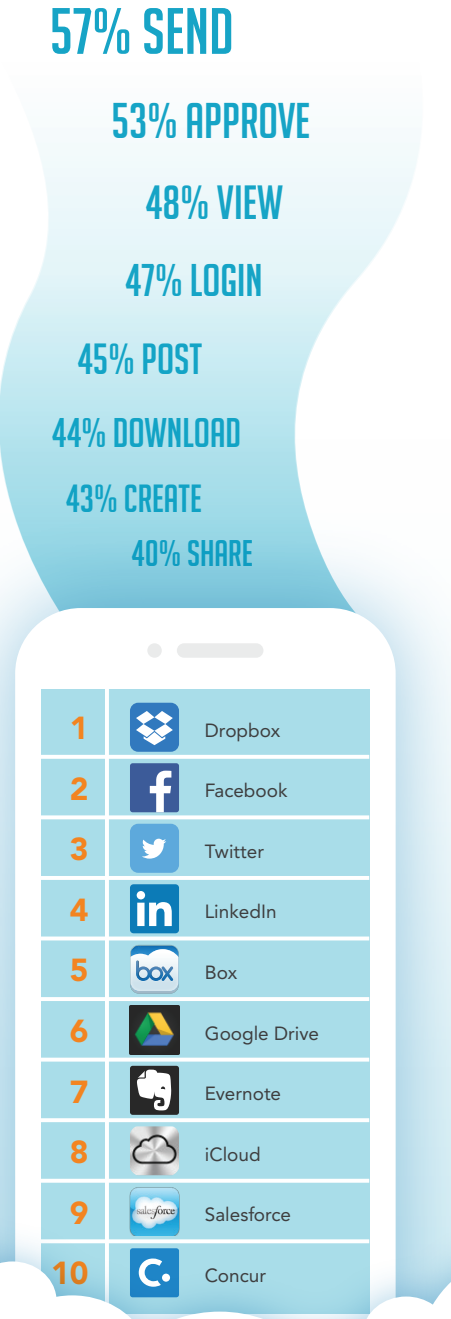
- Dropbox
- Facebook
- Twitter
- LinkedIn
- Box
- Google Drive
- Evernote
- iCloud
- Salesforce
- Concur

Besides simply logging in, what activities do people perform while on their mobile devices? Nearly half of all enterprise cloud app activities occur on mobile devices, with more than half of "send" and "approve" activities occurring on mobile.

The most common cloud activities performed on a mobile device

- 57 percent of all "send" activities occur on mobile devices
- 53 percent of all "approve" activities occur on mobile devices
- 48 percent of all "view" activities occur on mobile devices
- 47 percent of all "login" activities occur on mobile devices
- 45 percent of all "post" activities occur on mobile devices
- 44 percent of all "download" activities occur on mobile devices
- 43 percent of all "create" activities occur on mobile devices
- 40 percent of all "share" activities occur on mobile devices

Beyond the activities themselves, a high number of activity-based policy violations occur on mobile devices, the highest of which is 59 percent of "download" violations. Moreover, more than one-third (34.0%) of all DLP policy violations occur on mobile devices.



TOP CLOUD ACTIVITIES IN THE NETSKOPE ACTIVE PLATFORM

Aside from "login," the top activities in the Netskope Active Platform include "view," "download," "edit," "create," and "upload." Netskope normalizes these activities across apps within categories and even across categories, so whether a user modifies a customer record in a CRM app or edits a vendor field in an expense reporting one, both of those are recognized as an "edit" activity. These activities are listed here from highest to lowest in occurrence:

Top cloud app activities by category in the Netskope Active Platform

Cloud Storage

- Download
- View
- Share
- Upload
- Delete

CRM/SFA

- Download
- Create
- Edit
- Post
- Delete

Collaboration

- Create
- View
- Edit
- Upload
- Download

HR

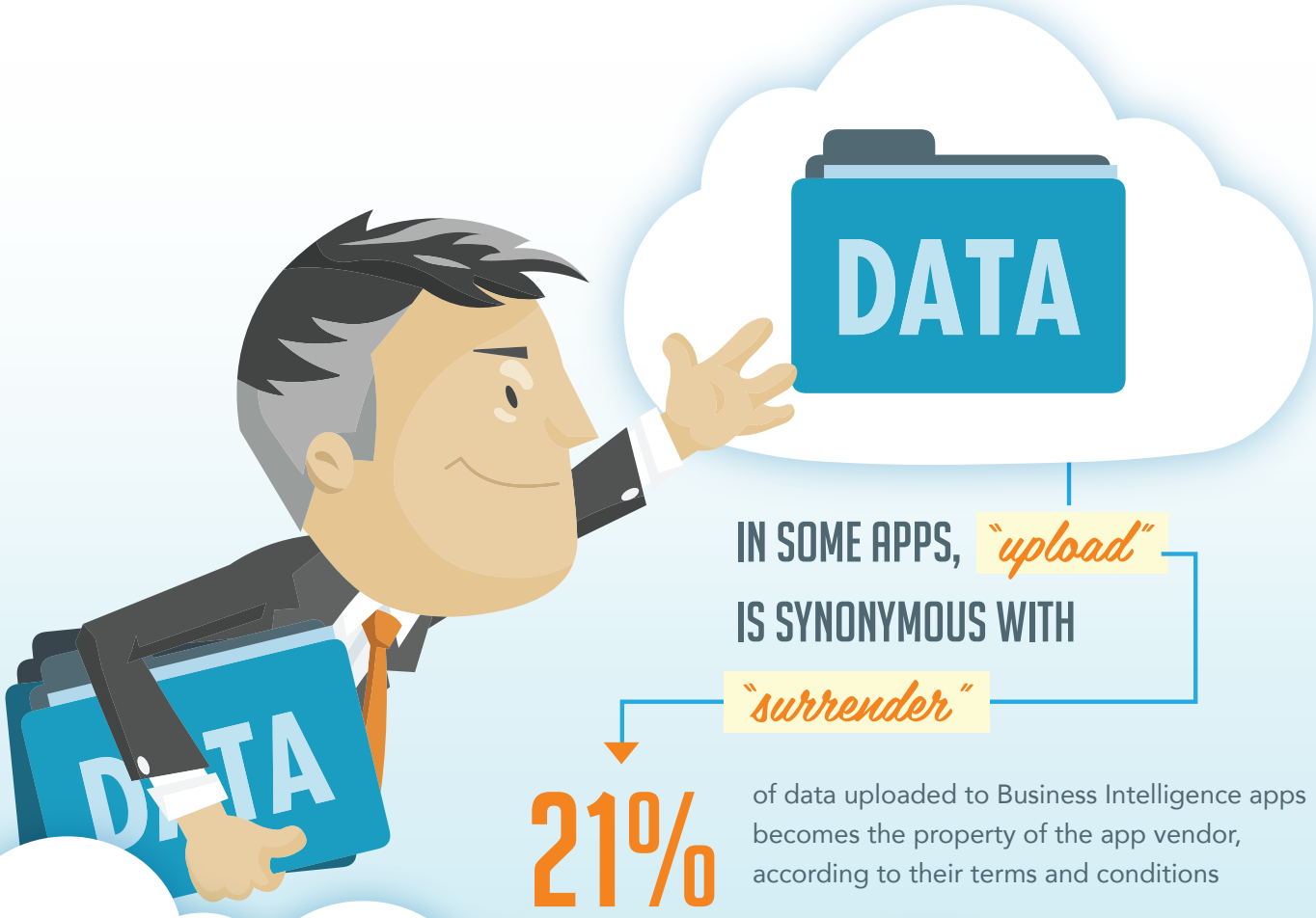
- Terminate
- Create
- Edit
- Delete
- Download

Finance/Accounting

- View
- Download
- Edit
- Delete
- Upload

A few notable findings related to activities in cloud apps include:

- For every one “view” in an HR app, there is a “download”
- For every one “upload” in a CRM/SFA app, there are thirteen “downloads”
- Nearly one-third (31.3%) of all activities in Finance/Accounting apps result in data being changed (“edit” and “delete”)
- For every “upload” in a Software Development app, there are three “downloads”
- 70 percent of data that are uploaded to Cloud Storage apps are to ones that don’t separate tenant data in the cloud
- 21 percent of data that are uploaded to Business Intelligence apps are to ones that say that the vendor owns the data
- People are three times as likely to “share” from apps that aren’t enterprise-ready

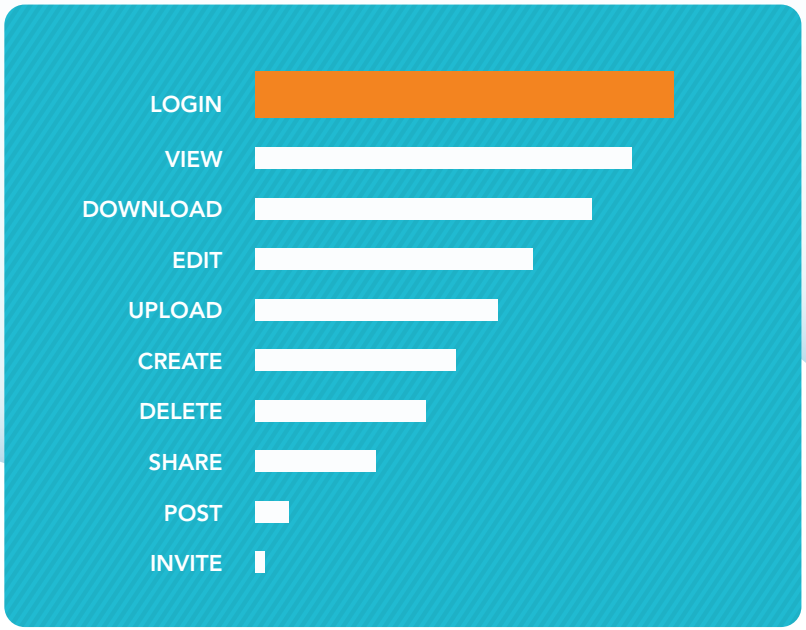


TOP POLICY VIOLATIONS IN THE NETSKOPE ACTIVE PLATFORM

Beyond measuring usage and activity, we also look at policy violations in the Netskope Active Platform. Customers can define policies very granularly, taking into consideration user, group, location, device, browser, app, instance, category, enterprise-readiness score, DLP profile, activity, and more. While we abstract a normalized set of apps, categories, and activities that constitute a violation, the actual policies can range broadly from blocking the download of personally-identifiable information from an HR app to a mobile device, to alerting when users share documents in Cloud Storage apps with someone outside of the company, to blocking unauthorized users from modifying financial fields in Finance/Accounting apps.

The five cloud app categories with the highest volume of policy violations[3] include Cloud Storage, CRM/SFA, Collaboration, HR, and Finance/Accounting. The top activities that constituted a policy violation are "login," "view," "download," "edit," "upload," and "create."

Top Cloud App Activities that Constitute Policy Violations in the Netskope Active Platform listed from highest to lowest in occurrence:



3 Volume of policy violations is measured as number of times a defined policy or set of policies are triggered by that combination of parameters being met, e.g., a sales user on a mobile device tries to upload content that matches the PCI DLP profile.

Below are the top activities that constituted a policy violation per cloud app category. Just as activities can vary between apps, policy violations involving those activities can vary. For example, a policy violation involving downloading from a Cloud Storage app can be the improper downloading of a non-public press release, whereas in a CRM/SFA app could signal theft of customer data by a departing employee.

Cloud Storage

- View
- Login
- Download
- Edit
- Share

CRM/SFA

- Login
- Edit
- Download
- Create
- Post

Collaboration

- Login
- Create
- Edit
- View
- Upload

HR

- Login
- Create
- Terminate
- Invite
- Edit

Finance/Accounting

- Create
- View
- Login
- Download
- Edit

The top categories for *data leakage* policy violations include: