

REPORT HIGHLIGHTS

- > 15 percent of users have had their credentials stolen, and an estimated 13.5 percent of organizations' cloud apps are at risk
- > Organizations have 613 cloud apps in use on average, 88.1 percent of which aren't enterprise-ready
- More than 20 percent of organizations have more than 1,000 cloud apps
- > 8 percent of files in corporate-sanctioned cloud storage apps constitute a DLP violation

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™.

This quarter we augment our analysis with research on compromised accounts. We have noticed a heightened percentage of users logging into business cloud apps with credentials that have been compromised, likely due to an increased number of recent data leaks. Based on observations from several of our customers, Netskope researchers estimate that 15 percent of users have had their account credentials compromised. Even with IT's valiant efforts at securing sanctioned cloud apps with single sign-on and multi-factor authentication, our researchers estimate that 13.5 percent of organizations' cloud apps are at risk of access by users with compromised credentials.

The average number of cloud apps in use per organization grew to 613 this quarter from 579 last quarter. 88.1 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. More than 20 percent of organizations in the Netskope cloud have more than 1,000 apps.

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, HR, Productivity, and Finance/Accounting.

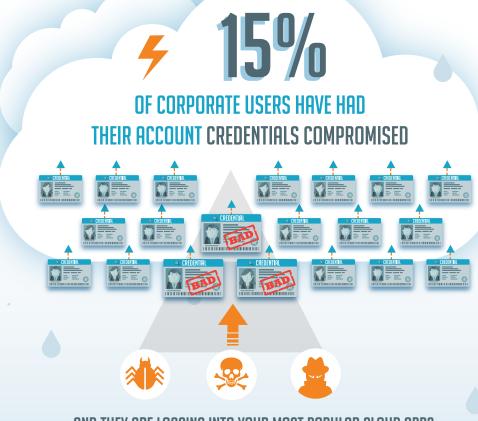
Report findings are based on tens of billions of events seen across millions of users in the Netskope Active Platform and represent usage trends from October–December 2014.

COMPROMISED ACCOUNTS

This quarter we augment our analysis with research on compromised account credentials. Likely due to significant increases in data leaks from major corporations, websites, and cloud apps, a growing number of users are logging into their business cloud apps using compromised credentials, or login names and passwords that have been stolen as part of a data hack or exposure. Based on customer data, Netskope researchers estimate that 15 percent of users have had their account credentials compromised. Even with valiant efforts by IT and security teams at securing cloud apps with single signon and multi-factor authentication, many apps remain at risk.

Many studies, including this one, show that as many as half of all users reuse their passwords for multiple accounts. Given that fact, the chances are high that users have logged into popular enterprise cloud apps like Salesforce, Box, Dropbox, Concur, and WebEx using credentials that have been compromised in a different app.

Many conscientious IT professionals have already taken steps to protect their sanctioned corporate apps, but often haven't done anything to protect unsanctioned, departmental apps, some of which are highly used and important to the business. Based on our customer data, Netskope researchers estimate that at least 13.5 percent of organizations' apps are at the intersection of unsanctioned and business-critical. Those apps are usually not protected by single sign-on, nor is multi-factor authentication enforced in them, and they are at risk of being accessed by users with compromised credentials. Moreover, an exposure in an unsanctioned or even an obscure app can have a spill over effect, with people using the same credentials that were compromised in a lesser-known app in a mainstream app, thus creating a hard-to-detect exposure in the latter.

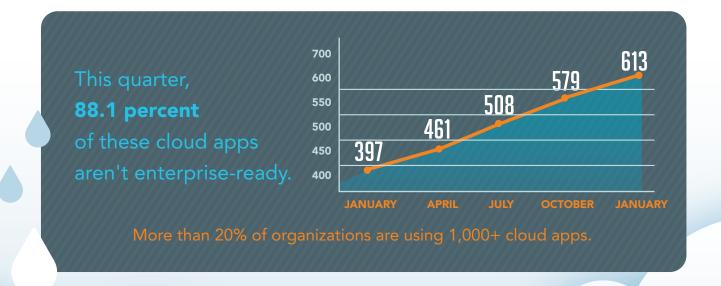


...AND THEY ARE LOGGING INTO YOUR MOST POPULAR CLOUD APPS

13.5% OF CLOUD APPS ARE AT RISK OF ACCESS

CLOUD ADOPTION CONTINUES ITS CLIMB

Overall, enterprises using the Netskope Active Platform have an average of 613 cloud apps, up from 579 last quarter. 88.1 percent of those apps aren't enterprise-ready, scoring a "medium" or below in the Netskope Cloud Confidence Index^{TM1} (CCI), an objective measure of cloud apps' security, auditability, and business continuity that has been adapted from the Cloud Security Alliance. More than 20 percent of organizations in the Netskope cloud have more than 1,000 apps.



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."

CLOUD APP USAGE BY CATEGORY

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 category, followed by Collaboration, Human Resources (HR), Productivity, and Finance/Accounting. 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 read
Marketing	67	96%
Collaboration	43	84%
Human Resources	38	93%
Productivity	36	89%
Finance/Accounting	31	95%
Cloud Storage	28	72%
CRM/SFA	25	92%
Software Development	25	87%
Social	18	76%
IT/Application Management	16	73%

MOST-USED ENTERPRISE CLOUD APPS

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 36.2 percent of total usage in Netskope. Other categories represented in the top 20 include Call Center, Collaboration, Consumer, Customer Relationship Management/Salesforce Automation (CRM/SFA), Finance/Accounting, Marketing, Productivity, and Webmail. We define "usage" as number of distinct app sessions.²



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.

TOP CLOUD ACTIVITIES IN THE NETSKOPE ACTIVE PLATFORM

Aside from "login," the top activities in the Netskope Active Platform include "send," "download," "view," "upload," and "edit." 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

- View
- > Download
- > Upload
- Share
- **>** Edit

CRM/SFA

- > Download
- View
- > Edit
- > Create
- **>** Share

Collaboration

- Create
- View
- > Edit
- **>** Download
- > Upload

HR

- **>** Share
- > Upload
- > Download
- Create
- **>** Edit

Finance/Accounting

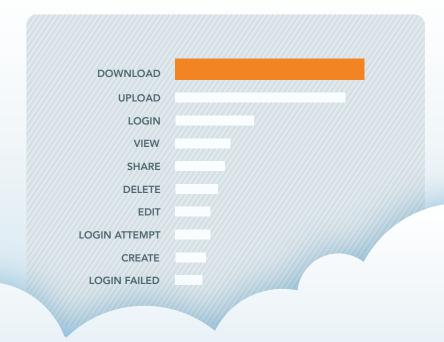
- > Edit
- Create
- > Upload
- Delete
- **>** Share



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 in a very granular way, 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.

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.



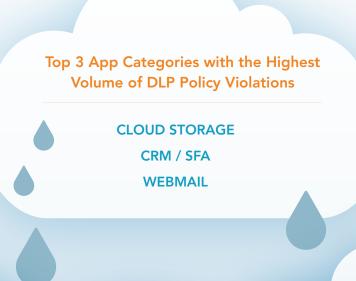
STORAGE	WEBMAIL	CRM/SFA	SOCIAL	FINANCE/ ACCOUNTING
Download	Send	Download	Create	View
Upload	Upload	Upload	Login	Edit
Login	Download	View	Post	Delete

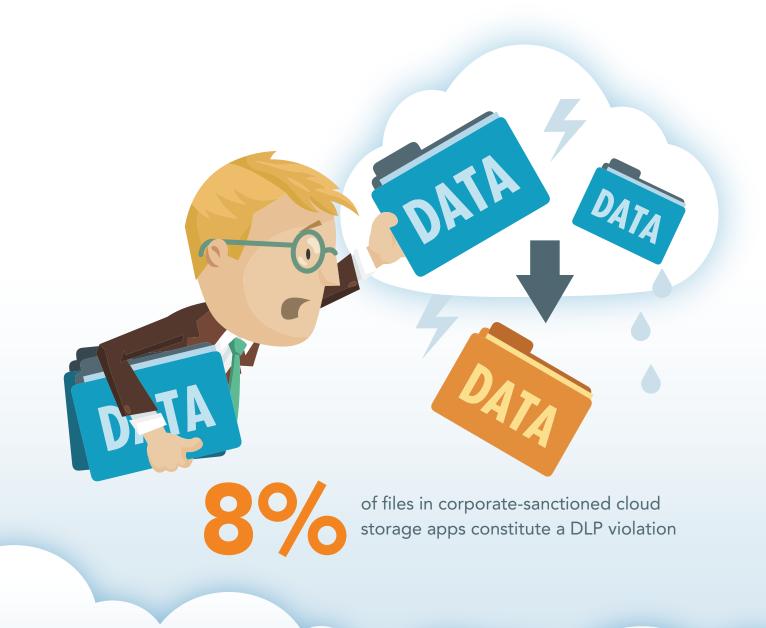
DATA LOSS PREVENTION IN THE CLOUD

Data loss prevention policy violations involving the upload of data outnumber those involving the download of it by nearly three-to-one.

In addition to discovering DLP violations by monitoring content en route to or from cloud apps, Netskope also provides content introspection, or the discovery of content residing within apps, irrespective of when it was uploaded. In those situations, 8 percent of content files contain DLP violations.

Beyond DLP, introspection also reveals shared status of all files in an organization's sanctioned cloud storage app. Overall, one-fourth of all files are shared with one or more people outside of the organization. 40 percent are shared within the organization, and 35 percent are private. Of external users who have links to content, nearly 12 percent have access to 100 files or more.





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