

# Netskope for Web

Provides next-generation secure web gateway (NG SWG) capabilities to prevent malware, detect advanced threats, web filter by categories, protect data, and control apps and cloud services for any user, location, or device. The Netskope Platform unifies secure web gateway (SWG), cloud access security broker (CASB), and data loss prevention (DLP) into one console.



## QUICK GLANCE

- Web traffic and app granular policy controls including data, activity, and context
- Risk-based coaching alerts for user-led adoption of apps and cloud services
- Cloud performance and scale to inspect any user, device, or location
- Data loss prevention for managed and unmanaged apps, and web traffic
- Malware and advanced threat defenses, sandboxing, and 40+ threat intelligence feeds
- Single cloud console with consistent policy controls for SWG, CASB, and DLP functions

## Changing landscape for web security

Digital transformation driven by cloud and mobility continues to advance where 85% of web gateway traffic is identified through apps and cloud services in the Netskope Cloud Confidence Index<sup>1</sup>. And 83% of web traffic is encrypted<sup>2</sup> creating new blind spots for data leakage and threat entry for managed and unmanaged apps, cloud services, and web traffic.

Today, an average company uses over 1,295 apps and cloud services where more than 95% of these are unmanaged with no IT administration rights<sup>3</sup>. Secure web gateways need to advance beyond traditional URL filtering of web requests to decoding app API traffic

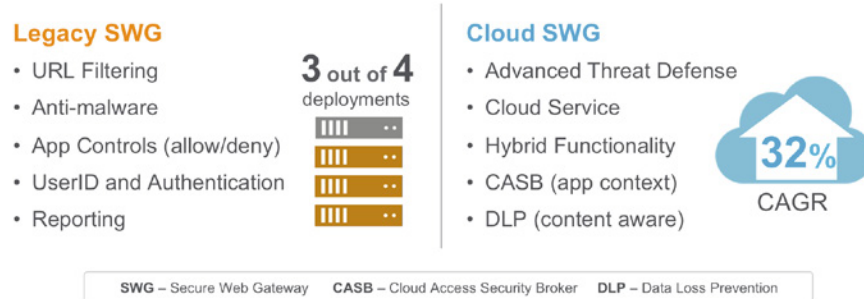
for thousands of apps and cloud services in order to understand and protect content and context. Inline web security deployments also require on-demand cloud performance to inspect encrypted web traffic and cloud scale with globally distributed cloud access for remote office and mobile users.

As business transactions migrate to cloud-based apps and data, web security solutions must also evolve and reduce latency, multiple hops of default web routes and inefficiencies. Providing a cloud based SWG with secure access to the standard internet is not sufficient for current and future business transactions. Security and speed are required for low latency, high capacity access to cloud-based apps and services.

## Cloud SWG with on-demand performance and scale

For over a decade, appliance based SWG deployments have dominated the landscape where approximately three out of four still exist today. However, this landscape is quickly changing to cloud SWG deployments qualified by the following Gartner “Critical Capabilities of Secure Web Gateways” report quote.

In the same Gartner report from December 2018, a significant shift surfaced for SWG capabilities, and to no surprise, driven by digital transformation. The chart below illustrates the shift from known legacy SWG features compared to new cloud SWG critical capabilities, highlighted in the report alongside the forecasted 32% compound annual growth rate.



Source: Gartner – Critical Capabilities for Secure Web Gateways, Dec. 2018

**“THE MOST DISRUPTIVE FACTOR IN THIS MARKET IS THE RAPID GROWTH OF THE CLOUD-BASED SWG SERVICES.”**

Critical Capabilities for Secure Web Gateways, Gartner, December 27, 2018

The same Gartner report further notes, “CASB functionality is rapidly becoming an important feature of SWG solutions”. Given DLP is a top-rated feature of CASB solutions, providing a unified SWG+CASB+DLP solution from the cloud, for the cloud, and without limits, it makes perfect sense.

## Granular policy controls with Cloud XD


Dynamic web sites today use the same underlying language as apps and cloud services. Being able to decode this language is a critical capability for next generation SWG solutions as data-flows-like-water in the cloud. Given less than 5% of apps are managed with IT administration rights, data flowing in unmanaged apps becomes the elephant-in-the-room for cloud SWG deployments to address with users in any location on any device. This drives the convergence of SWG, CASB, and DLP inline capabilities for complete visibility and granular policy controls into thousands of apps.

Coarse-grained “allow” or “deny” policies are also being replaced with an understanding of content and context for user, app, instance, risk rating, data, and activity in granular policy controls. An activity in a company instance of an app for confidential data may make sense, while the same app and data does not for a personal instance, as it could be data leakage or theft of a soon-to-depart employee.

Sources:

1. Netskope Threat Research Labs, 2019
2. Google HTTPS Encryption Transparency Report, September 2019
3. 2019 Cloud Security Report, Cybersecurity Insiders

## Rich policy context of CASB+SWG+DLP



User, Group, OU	Device	App	Instance	CCI Rating	URL Category	Activity	Threat	Content	Policy Action
Pat Smith Accounting	Managed Personal	box Cloud Storage App Managed Unmanaged	Company Personal	30K Apps 97 Risk Security Privacy Legal/ Audit/GDPR 50+	File Sharing 100+ Categories	Upload File (up, down, share, view)	AV/ML IOCs Scripts Macros Sandbox	DLP Profiles And Rules	Allow Block Coach Encrypt Legal Hold Quarantine etc.

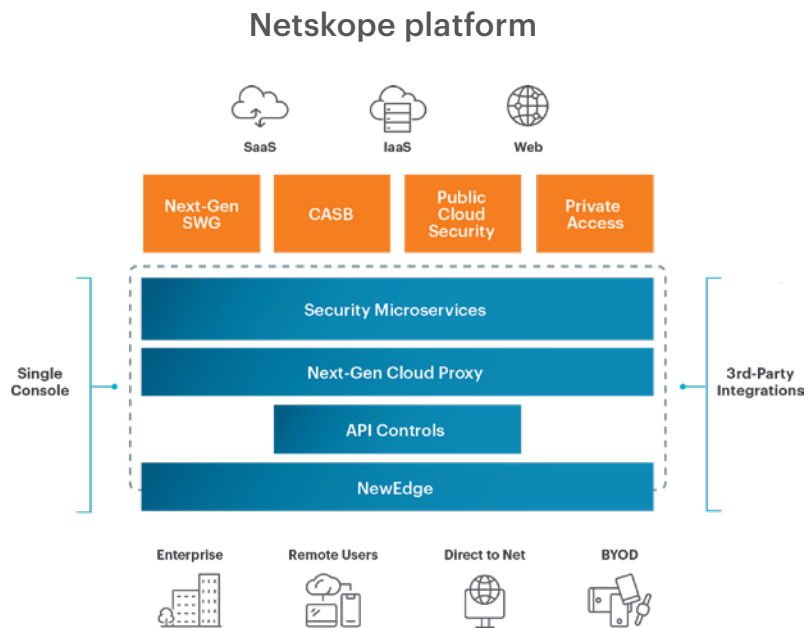
Pat from accounting on desktop using personal Box instance uploading files [?] DLP check, coach if PCI, PII, etc.  
 Pat from accounting on desktop using company Box instance uploading files [?] check for malware/threats  
 Pat from accounting on mobile using company Box instance to download files [?] view only mode  
 Pat from accounting on desktop browsing web gambling site [?] block site, coach user with AUP alert

Netskope Cloud XD provides granular visibility and policy controls to web traffic, apps, and cloud services. Cloud XD decodes the language of the cloud and web for an intelligent, consolidated view of cloud and web usage. Unlike legacy web security solutions that overwhelm administrators with logs for every HTTP/S transaction, Cloud XD synthesizes and distills web activity to user site and page visits with the ability to drill down into fine grain details.

## One platform and console with unified policy controls

The cloud delivers business acceleration and improved security, while Netskope extends those benefits even more so with one console and unified policy controls for combined inline SWG+CASB+DLP capabilities for the next generation of web security. The Netskope Platform offers several benefits supporting cloud-first organizations, including: a data-centric design to protect data and users everywhere; cloud-smart intelligence to safely enable the cloud and web; plus, an advanced, high-capacity global architecture that delivers fast and scalable security.

Netskope protects some of the largest global companies with industry-leading proxy inline inspection of web traffic, apps, and cloud services without limiting performance or scale, nor increasing latency. If you have concerns about data exposure or loss in unmanaged apps or web sites, plus advanced threats operating in these apps and sites, then Netskope can provide you some peace of mind.



USE CASE & OVERVIEW	NEXT GENERATION SWG FEATURES INCLUDE:
<p><b>Web Traffic, App, and Cloud Service Visibility and Control</b></p> <p>Netskope provides a custom app API proxy to understand thousands of apps for content and context unmatched by legacy SWG solutions. Easy to deploy cloud-based forward or reverse proxy deployments provide inline visibility and granular policy controls to web traffic, apps, and cloud services.</p>	<ul style="list-style-type: none"> <li>• Discovery via inline analysis or logs with the option to encrypt PII fields for privacy</li> <li>• URL filtering with 100+ categories for over 200 languages covering 99.9% of the active web</li> <li>• Dynamic web page ratings for 70 categories, plus custom categories, app categories, and YouTube categories</li> <li>• CASB managed and unmanaged app inline visibility and granular policy controls for over a thousand apps</li> <li>• Cloud Confidence Index™ (CCI) risk ratings for more than 36,000 apps and cloud services using 50+ CSA attributes</li> <li>• Cloud performance to inspect encrypted traffic</li> </ul>
<p><b>Malware and Advanced Threat Detection</b></p> <p>Multiple cloud defense layers include anti-malware, pre-execution script analysis and heuristics, sandboxing, and machine learning anomaly detection managed by Netskope Threat Research Labs.</p>	<ul style="list-style-type: none"> <li>• 40+ threat intelligence feeds, plus custom IOC hash and URL feeds</li> <li>• UEBA to detect access compromise and anomalies</li> <li>• Cloud-based sandboxing, plus 3rd party support for Checkpoint, Juniper, and Palo Alto Networks sandboxing</li> <li>• 90 days of rich metadata (default), longer by contract</li> <li>• Export data via REST API, plus share threat intelligence in open source formats</li> </ul>
<p><b>Data Loss Prevention (DLP)</b></p> <p>Allow or deny policies do not support business units freely adopting apps where one click can post, share, upload or download data. Understanding content and context is required for policy controls making DLP a critical capability. Netskope delivers with award-winning DLP for web traffic, apps, and cloud services.</p>	<ul style="list-style-type: none"> <li>• Cloud-based DLP with over 3,000 data identifiers supporting 1,000+ file types, plus 40+ pre-built policy templates</li> <li>• Detect data via multiple methods including custom regex, fingerprinting, exact data match, proximity analysis, pattern and keyword matching, metadata extraction, and OCR (API mode)</li> <li>• DLP actions include the ability to alert, allow, block, provide coaching messages, tombstone files, tokenize or encrypt data (structured and unstructured), legal hold, and quarantine data</li> <li>• Machine learning detection of data moving between company and personal app instances to detect insiders and data leakage</li> </ul>
<p><b>Advanced Web Analytics and Reporting</b></p> <p>Policy controls are defined and driven by Netskope Cloud XD with an intelligent user-focused view of web, app, and cloud service use for analytics and reporting. Cloud XD synthesizes and distills web activity into user site and page visits on which security teams want to focus.</p>	<ul style="list-style-type: none"> <li>• Enable SOC teams to quickly investigate alerts understanding content and context of web, app, and cloud service activity</li> <li>• Real-time analytics provide summary dashboards and reports</li> <li>• Drill down into more detailed views by user, site, and page</li> <li>• Flexible, ad-hoc query engine to mine 90 days of rich web and app activity metadata, longer by contract</li> <li>• Export data and open API integrate with 3rd-party solutions</li> </ul>
<p><b>Direct-to-Internet Coverage</b></p> <p>Netskope enables remote offices and mobile users to go directly to the web wherever they are located. Optionally, Netskope for Private Access for zero-trust network access replaces traditional VPNs connecting users directly to private apps, databases, or resources within public clouds and datacenters.</p>	<ul style="list-style-type: none"> <li>• IPsec and GRE tunnels for remote offices, plus a lightweight steering client for mobile users</li> <li>• High performance software-defined globally distributed data centers with optimized web routes and hops for low latency, typically less than 20ms latency for any user</li> <li>• Microservices cloud-native architecture designed for on-demand performance and scale of security services</li> <li>• Eliminate cost and performance issues associated with backhauling web traffic, plus web security appliances</li> </ul>

The Netskope security cloud provides unrivaled visibility and real-time data and threat protection when accessing cloud services, websites, and private apps from anywhere, on any device. Only Netskope understands the cloud and takes a data-centric approach that empowers security teams with the right balance of protection and speed they need to secure their digital transformation journey. Reimagine your perimeter with Netskope.

