

# Learning to live with Cloud Apps



# Key concepts

As businesses transform themselves digitally, customer experiences increasingly depend on the quality and performance of the applications that support those customer interactions

**Today, apps are hosted everywhere** – in public and private clouds and in enterprise data centres. Employees often sign up for numerous apps, without any official IT department sanction or involvement, behaving like a shadow IT department, sprawling corporate data all over the cloud. Keeping a grip on which apps are holding business-critical data is challenging, as is data governance and ensuring those apps deliver consistent business benefits.

## Application Awareness™

A suite of tools to provide insight into the performance of business critical applications, wherever they're hosted, to manage shadow IT and contain cloud sprawl, ensuring that every customer interaction is a good experience.

## AppVis™

Our application auditing and discovery tool, designed to help business-level audiences see their enterprise application usage, throughout their enterprise, clearly.



Application  
Awareness  
APPVIS

# Introduction



**Seven in ten workers in the UK** are using cloud technologies that are not managed or supervised by their company.\*



**Nearly three in four organisations** have no idea which “unofficial” apps are running on their IT infrastructure.\*\*

## Why? Because there are compelling, rational, indisputable reasons for using unsanctioned apps in business

Applications in the public cloud provide immediate business benefits and rapid return on investment. Compared to hosted-on-premises, bespoke, monolithic business applications, software as a service is often more responsive (due to the scale of their hosting) and of better quality (thanks to the larger user base submitting defect reports and defining the user experience). It can be deployed almost immediately and is comparatively cheap.

Signing up to use a cloud app in an enterprise context is fast, easy and fuss free. Compared to waiting for the enterprise IT department to provide similar functionality, there really is no contest. Adopting a cloud app to do a business critical job may be the competitive advantage that an enterprise needs.

\*Cloudstanding.co.uk, May 2016    \*\*Cloud Security Alliance (CSA) Jan 2015

## There is a price to pay for this immediate improvement in business competitiveness



### Shadow IT

Where the enterprise IT department is unaware of the applications being used to run the business. That means they can't effectively manage, support or protect the IT infrastructure since they don't even know which apps are running in their enterprise and underpinning their business.



### Cloud sprawl

Where the sheer number of interdependencies, with a large variety of cloud app providers, introduces new and significant risks to business continuity.



### Compliance, data protection, privacy and security issues

A third significant down side to cloud apps is that it makes it difficult to know where sensitive data is held.

The reality is that the trend toward using software as a service is more or less irreversible. The benefits are just too great. Instead, enterprises need to shape their policies on which apps are sanctioned and unsanctioned, on an informed basis, where risks can be sensibly assessed and weighed against business benefits.

Service providers are often faced with the challenge of taking over the management of an existing, brown field IT estate from an incumbent. To deliver a quality service, they need to understand what the enterprise is asking their infrastructure to support. Both the service provider and their business customer need to know what the bandwidth provided is being used for, so that both can arrive at sensible capacity planning decisions.

**In all cases, knowing which applications are running and where is a vital piece of information. It needs to be timely and accurate. It also needs to be presented simply, so that trends are visible at a glance.**

# Business Impacts

The use of cloud based applications, hosted in hybrid clouds, has impacts on the profitability and viability of any business that relies on them

While there are undoubted cost savings and a high return on investment, it's also true that cloud apps are holding data of importance to the business. While cloud apps proliferate, with little managerial oversight or governance, exposure to trouble increases, costs are not controlled and employees are not taught to discriminate between benevolent and less safe applications.



## Disaster recovery

In any digital business, it's prudent to have a reliable disaster recovery and business continuity plan. If your business depends on cloud based applications, how do you put your business back together, if the worst happens? If a critical application vendor goes off line, for any substantial period of time, what's plan B? How do you serve your customers when your providers are unable to serve you?

**Once again, knowing what your app footprint is can be the first step in making disaster recovery and business continuity plans that work.**



## IT support

Enterprise IT often performs a deskside support role, keeping the wheels of the business turning by remedying any IT issues that arise on applications or devices that employees depend on to get their work done. If the apps in use are unknown to the IT department, then they cannot monitor or alert on them. The first they know of any trouble is when the user calls it in. At that point, they have no data to guide them toward a rapid solution.



## Data management

Without a clear view of where the data resides, spread throughout myriad separate cloud apps, another business affecting issue can be that it becomes difficult to identify the system of record, which holds the definitive data about a customer and their interactions with the business. If there are data synchronisation discrepancies, mistakes can be made, which can be costly to the business and harmful to the customer experience. Knowing where the data is can be the first step in understanding which data is the truth.



## Bandwidth provision

Bandwidth provision represents a significant cost item for any digitally-transformed business, so it's important that the provisioning is right-sized. Too much capacity is as bad as too little, because the first impacts margins, while the latter impacts customer satisfaction and revenue. If the bandwidth is being consumed primarily by unsanctioned apps, what confidence is there that the connectivity is being used wisely and judiciously, for the benefit of the business and its customers?

# Gaining Insight

The network packets never lie; They tell the full and unalloyed story of which applications are in use and where that traffic is flowing



Identifying network traffic, at a logo-level, provides tremendous insight into how the enterprise network is being used, which applications the corporation is dependent on and where the data is flowing.

Characterising the application traffic and tying it to branch office locations is an important step in defining policies and practices which allow the company to reap the benefits of cloud based applications, while minimising the risks and the costs to the business of unmanaged, unsanctioned app usage.

**Gaining insight is a pre-requisite to taking control**



# Application Discovery

Highlight's AppVis™ tool takes advantage of Cisco's NetFlow data, available on its enterprise-class routers, to analyse and characterise the applications flowing through each node of the corporate network. Highlight, with its multi-tenant, multi-user architecture, collects this data and relates it to locations defined in the software. The applications are displayed on a single pane of glass, for each location or for each folder.

Sort: Usage Order: Descending Results: 10

Logo	Name	Category	First Seen	Last Seen	Usage	Locations
 Encrypted Traffic	SSL	browsing	01 Aug 16	14 Sep 16	620.10 GB	3
 YouTube	Youtube	consumer-streaming	01 Aug 16	14 Sep 16	309.28 GB	3
Location			First Seen	Last Seen	Usage	
Offices » Bristol			01 Aug 16	14 Sep 16	297.80 GB (96.3%)	
Offices » Manchester			01 Aug 16	12 Sep 16	8.51 GB (2.75%)	
Offices » London			01 Aug 16	12 Sep 16	2.98 GB (<1%)	
 Web Browsing	HyperText Transfer Protocol	browsing	01 Aug 16	14 Sep 16	78.53 GB	3
 Network Management	Simple Network Management Protocol	net-admin	01 Aug 16	14 Sep 16	41.56 GB	3
 Email Delivery	Simple Mail Transfer Protocol	email	01 Aug 16	14 Sep 16	24.83 GB	3
 Data transfer	Binary over HTTP	file-sharing	01 Aug 16	14 Sep 16	18.82 GB	3
 Ping	Ping		01 Aug 16	14 Sep 16	16.75 GB	3
 STEAM	Steam	gaming	14 Sep 16	14 Sep 16	13.61 GB	1

**Expanded location view**

**Amber indicates this app has recently appeared**



## How does it work?

Based on Cisco's NBAR2 network based application recognition technology, Highlight can recognise thousands of applications. The list is continually updated, by Cisco, through regular NBAR2 application pack updates. Custom applications can be given user-friendly names and logos too, and surfaced to the application discovery breakdown shown in the AppVis tool.

Highlight also collects the volume of traffic attributable to each discovered application, at every location in the enterprise network, allowing business-level users to observe patterns of usage.



## Get results immediately

It only takes minutes to get the first results and thereafter, the AppVis page updates at regular intervals, to update the pattern of application usage observed.

Highlight's AppVis is easy to turn on, requiring some simple router configuration to emit the required data (Cisco routers are required). The software is supplied as a service, so there is no CapEx cost and partners already using Highlight will find AppVis is a very simple-to-deploy add-on.

# Business Benefits

The AppVis tool provides application visibility at a glance, with applications identified with easy-to-recognise, eye-catching logos

You don't need to be technical to understand what kind of traffic is flowing throughout your business network. The entire story, across the whole enterprise IT estate, can be seen in aggregated form, with breakdown by location just a click away. With remote locations and wide area networks, seeing what application traffic is being carried provides real power to business planning processes.

Knowing where and what application traffic is flowing through your network is the key to containing costs, managing valuable corporate data and getting the most value from your business critical applications and network infrastructure.



# Summary

Being able to see the applications in use, in your enterprise, location by location, is the first step in knowing which cloud apps deliver value, allowing you to create policies that sanction some applications, while discouraging the use of others

As the usage patterns unfold, in near real time, enterprises can learn a lot about the applications in use and when the demand is greatest, providing better data to make capacity planning decisions around. Once the applications in use are understood, then sensible controls and policies can be put in place.

AppVis allows an enterprise to benefit from the power, quality and agility of cloud apps, without paying a terrible price for doing so

## Get in touch

If you are a service provider, adopt and sell the new Application Awareness feature, AppVis, to give you and your customers much better insight and control over what's running in their networks. Contact your Highlight account manager for more details.

If you are a business user and want to know what's going on in your network, in an easy to understand way, ask your service provider for more details.

## For more details about AppVis

 [Contact your account manager](#)

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