



# The Microsoft Freeway

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**Network performance  
powers the cloud-first  
Microsoft experience**





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# The network - empowering people to achieve more

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Technology is revolutionising the way we live and the world we live in, whether through advances in health, education, smarter cities or more efficient food production. Microsoft's cloud applications are a key enabler for millions of people to create this new world – to collaborate, be connected and achieve more with less.

Adoption of Microsoft's cloud applications continues unabated as organisations strive to improve productivity, streamline collaboration, increase operational efficiencies, and gain the flexibility and scalability to meet future business requirements. At the same time, they're seeking to reduce IT costs and keep pace with ever changing networks.

The success of cloud adoption is more dependent on network performance than ever. Gartner predicts that through 2019, more than half of all global-scale deployments of Microsoft Office 365 will experience network-related performance problems.

When network performance is poor, user experience and business productivity are impacted. This results in eroded business profits and increased network costs, as other stakeholders such as network managers, application resellers and network operators, try to identify the cause. This impacts the ROI on cloud investment and adoption of further applications.

Sinefa's network traffic visibility and control technology is the simplest and fastest solution on the market to overcome this challenge. Sinefa integrates seamlessly into both public and private cloud environments, as well as cloud hosted Microsoft platforms and applications.

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*“through 2019, more than half of all global-scale deployments of Microsoft Office 365 will experience network-related performance problems.”*

<sup>1</sup> Gartner: Network Design Best Practices for Office 365 – 3 August 2016

By delivering on the network to ensure the best Microsoft cloud experience every time, Sinefa enables you to create the Microsoft Freeway for your business. This overlay sits on top of any network to power Microsoft applications, as well as ensure flawless migration and application experience.

Read further to learn the essential requirements to create the Microsoft Freeway.

# The Microsoft Freeway

## Powering the Microsoft experience from the network

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Network and IT systems are in a constant state of change. New trends come and go as organisations continue to strive for a competitive edge. Despite this state of flux, insights are what power today's organisations.

The network is now more important than ever for connecting organisations to Microsoft's cloud productivity software. To get the best experience, your business needs to be on the Microsoft Freeway.

Sinefa's traffic visibility tells a story about your network, providing the fundamental insights needed to create the Microsoft Freeway. As an ovwg network infrastructure and applications. This means Sinefa can build the Microsoft Freeway on any network to deliver the ultimate Microsoft experience for all users.

**There are four key building blocks for the Microsoft Freeway:**

### 1. Pervasive network traffic visibility and insights

Networks are becoming more distributed. As a result, network traffic is becoming harder to identify and manage. The more complex your network, the more blind spots there are. You can't manage the unseen.

Complete network traffic visibility coverage and control is imperative to build the Microsoft Freeway. Internet (branch edge), wide area network (WAN), data centre, public cloud (Azure), private clouds and everything in between, now form part of all networks and require immediate traffic insights to be managed effectively.

Pervasiveness, however, needs to be coupled with rapid deployment, which is only possible with zero-configuration technology. Sinefa's zero-config capabilities combined with pervasiveness, deliver immediate insights for the network to power the Microsoft Freeway.

#### Useful links

[Zero-config deployments](#)

[Virtual & cloud deployments](#)

### 2. Baseline the network

Cloud applications add more traffic to network links, so it's critical that existing utilisation is known before additional services are added. Contention on the network link can have a significant impact on application performance. Without knowing the existing utilisation of links, you may inadvertently be adding new applications into a contented network.

Traffic visibility will determine if the network capacity to handle additional network services will suffice and understand the performance profile of these new services. This will allow you to rightsize the network (and to avoid unnecessary oversubscription) and identify any network specific issues that may impact performance.

To create the Microsoft Freeway, it's important to understand if you have the right capacity and network infrastructure to support it. Baselineing the network is the best way to assess network readiness for Microsoft cloud applications.

### 3. Monitor link quality

Increasingly, application traffic is going out to the internet directly from the branch edge. The quality of the link out to the cloud is crucial. While infrastructure and bandwidth may appear sufficient to create the Microsoft Freeway, the quality of the links can have a severe impact on application performance. Capacity overprovisioning, carrier outages, service degradations and equipment misconfiguration can be difficult to detect.

Understanding the link quality to key Microsoft services is critical to the maintenance of the Microsoft Freeway. Continuous monitoring of link quality between your organisation's locations and Microsoft applications, ensures you're on top of any degradations that may impact performance.

#### Useful links

[Setting up Azure public probes for Network Quality Scoring](#)

### 4. Guarantee performance

Now that you've moved your core business applications to the cloud, your business is even more dependent on your network. While the Microsoft cloud environment is high performance with loads of inbuilt redundancy, the weakest link between it and the overall user experience is the network edge (branch locations or data centre). In almost all cases, the network edge is where most congestion problems occur.

Automated traffic shaping ensures the Microsoft Freeway and the applications it carries are guaranteed the consistent and high performance they need.

#### Useful links

[Protect the performance of applications running on Azure](#)

*“Automated traffic shaping ensures the Microsoft Freeway and the applications it carries are guaranteed the consistent and high performance they need.”*

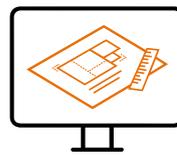
# Microsoft Azure

## Fault free migration and superior user experience

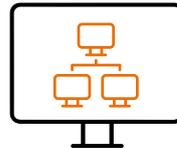
Migrating workloads to the cloud computing platform Microsoft Azure can be a daunting task, often heavily weighing down the network. Decreased application performance arises because the apps are farther away from users and there is contention for bandwidth resources over the network. This leads to increased user frustration.

By leveraging Sinefa's shaping capabilities, you can maximise available network infrastructure by allowing workloads to peak when critical productivity applications aren't using the network. Sinefa also enables you to prioritise and protect the performance of your applications running on the Microsoft Azure cloud.

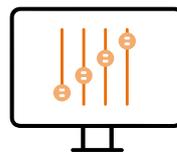
Sinefa offers insights and control for three migration phases to Microsoft Azure:



- 1. Planning/Microsoft readiness:** Sinefa provides baseline application traffic profiles and network quality information. This enables you to assess if your network and application ecosystem is ready for Microsoft Azure.



- 2. Migration/control:** This is where most projects fall over and cause user frustration. Sinefa enables a seamless migration, ensuring that the initial data hungry replication doesn't impact the user experience.



- 3. Monitoring/user experience:** Once migrated, Sinefa provides deep clarity into user and application experience on your network, leveraging application performance analytics for every single application.

### Useful links

[TCP Health and Application Round Trip Time \(RTT\)](#)

# Microsoft Office 365

Deliver the best experience

Microsoft Office 365 sessions compete with applications such as YouTube and Dropbox, causing congestion, slowness and a reduction in staff productivity. Sinefa's traffic shaping technology automatically takes care of this by prioritising Microsoft Office 365 applications and allocating bandwidth to them between all users. These applications gain priority access to the fast lane on your network.

By having the most detailed utilisation view of your network, Sinefa provides the insights and controls to create the Microsoft Freeway for the best experience regardless of other network activity.

*"The amount of control we have is incredible. By using Sinefa, we have been able to solve the problems we were having with backups and Office 365."*

Gerben Bremmer, Technical IT Specialist,  
Wavin Group

## Useful links

[Making adoption of Microsoft Office 365 a success](#)

[Network capacity planning for Office 365 migration made simple](#)

[Case Study - Rathbone Wine Group](#)

# Skype for Business

Make quality Skype calls with Sinefa

Skype for Business can be one of the most useful productivity tools for business, but when audio or video quality is compromised, it can turn what should be a useful tool into an aggravating experience.

Whether Skype for Business is used in the cloud or hosted in a data centre, having performance insights into calls and automatically prioritising it over competing applications ensures the best experience.

Sinefa's traffic shaping allows you to give priority to Skype for Business and ensure that recreational applications, downloads and backups do not degrade performance. This helps you to stay in control of bandwidth and deliver the best quality for Skype

*Renewed confidence has increased Skype for Business usage by over 350% and reduced user complaints to almost zero. Sinefa has proven to be a no brainer."*

Larrie Clark, Global IT Manager, rhipec

## Useful links

[Case Study – Wavin Group](#)

# Sinefa for Microsoft Partners

MSPs / system  
integrators / network  
operators

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## **Make Microsoft cloud a success over any connectivity**

Sinefa helps organisations to consistently deliver high performance Microsoft applications in the cloud with confidence, regardless of the underlying connectivity – whether you're using the Internet, multi-protocol label switching (MPLS) networks, SD-WAN, Microsoft Azure ExpressRoute, cloud link or other methods. Pervasive network visibility, along with traffic shaping, enables the best user experience for Microsoft cloud applications.

The Microsoft Freeway forms the foundation for building and delivering the best performing Microsoft services to your customers.

## **Troubleshoot like a champ; save time on Microsoft support tickets**

Now you can get the real network story before raising a ticket with Microsoft. Most performance issues take place at the edge of the network, which can be a tedious and lengthy troubleshooting exercise.

Understanding what's happening on the network can short circuit troubleshooting and reduce the "mean time to innocence" and costly finger pointing. Network traffic insights and control put an end to network performance issues and ensure that the Microsoft Freeway delivers the best Microsoft cloud experience.

## **Useful links**

[Using Sinefa to verify network quality during the Planning phase of a Skype for Business roll out](#)

 sinefa