

# Azure Virtual Desktop

A wide, open window to the workplace



# An Introduction to Azure Virtual Desktop

Your users want to work without the restrictions; to have access to their files and apps at any time, to work from anywhere in the world, and to have a consistent working experience across every device.

And while the Cloud has enabled the mobile workforce like no other technology before,

- What if your users could take their work further – with an even more consistent experience?
- How do you keep security continuous across user devices?
- How do you ensure users are working to the same standards and practices?
- Will you eventually need to invest in a whole new fleet of hardware?

Azure Virtual Desktop (AVD) seeks to answer all of the above, delivering the flexibility of Remote Working with the rigidity of a standardised remote working environment.

Wherever in your Cloud journey you may be, Azure Virtual Desktop (formerly Windows Virtual Desktop) provides a familiar solution for your Remote Working needs. Not only this, it does so using the most simplified approach to a virtual desktop yet – far removed from its much more complex predecessor, Remote Desktop Server.

In this eBook, we'll explore how AVD simplifies the remote desktop experience for you and your users, helping you identify use-cases, time and money-saving capabilities and the benefits of an Azure Virtual Desktop environment.

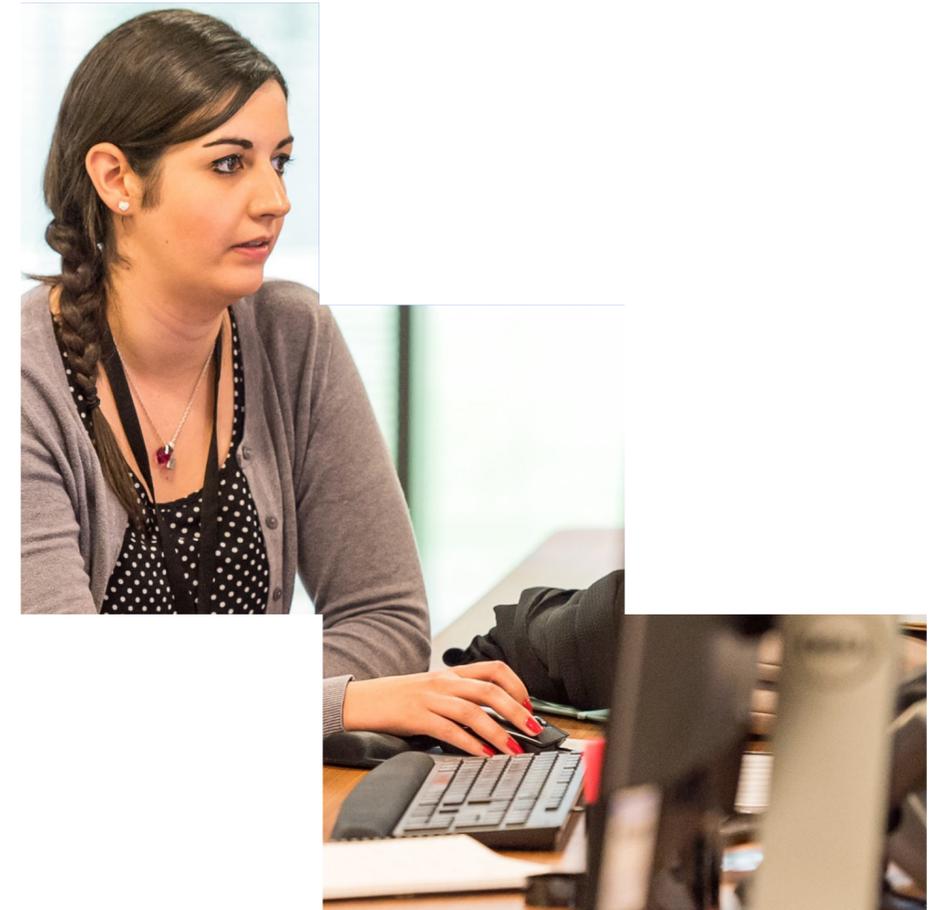
# Virtualising: A Single Solution for Multiple Users

Increasingly, businesses are relying on virtual solutions to keep them continuous. Yet as you become more familiar with your Cloud solutions, you may identify all new areas where the Cloud can increase efficiency. You might discover a need for more flexible, more secure ways of working – or that your existing remote working solutions are a little too limited. This is where Azure Virtual Desktop might become a valuable option.

## First things first: what is Azure Virtual Desktop?

AVD is a virtualised computer which resides in the Cloud, accessible on the internet from any compatible device. Together with Windows 10, it delivers a user experience that's almost identical to that of office working. Meanwhile, your admins can set usage rights, application access controls and security standards.

Unlike the typical desktop experience, AVD leverages Cloud technologies for impressive and transformative capabilities - most notably, serving an entire workforce from a single virtualised computer.



## How does Azure Virtual Desktop deliver the desktop experience differently – if not more effectively?



### Security

You rely on Microsoft to maintain your Cloud security, most notably via the Microsoft 365, OneDrive and SharePoint solutions you're already familiar with. AVD secures itself with those same reliable safety measures, while still allowing fine-tuning of your own security policies on the enterprise level.

#### With Azure Virtual Desktop:

- Your remote workers operate within a single secured environment
- You're protected behind the same Microsoft protections you've always relied on



### Flexibility

AVD provides even broader approaches to work than Microsoft 365 alone, virtualising an entire device as opposed to just the software. At the same time, it does so within a rigid framework dictated by your IT administrator, or provider. While flexibility is one of Remote Working's most renowned benefits, it's the way that AVD enables user freedom while providing tightened user policies that makes it so progressive.

#### With Azure Virtual Desktop:

- You quickly implement wide-reaching solutions for users
- You can support multiple users from a single desktop environment



### Savings

If you're already a Windows 10 Enterprise or Microsoft 365 user, your business may already be eligible for an AVD license. All you may need is an additional Azure account, and as with any Cloud solution, cost is based on the storage and number of virtual machines. AVD is designed to be accessible, and its licensing options simplify the cost with no need for up-front, on-prem purchases.

#### With Azure Virtual Desktop:

- You save on maintenance, update and security costs
- Your costs are made more manageable with regular license modelling.
- You provided even more functionality to your existing Windows solutions, including Windows 10 and Microsoft 365



## Continuity

AVD puts an entire virtual machine in the Cloud and allows multiple users to interact with it simultaneously; it even does so without this causing conflicts between users, a benefit we'll explain later in this eBook. By putting these virtualised devices in the cloud and making them accessible from anywhere, user hardware is the only variable when it comes to your company's continuity.

### With Azure Virtual Desktop:

- You leverage your existing Azure, Windows 10 and Microsoft 365 environment
- You provide a Cloud accessible, familiar recovery point when needed



## Maintenance

It's not only your Windows environment that AVD virtualises; it also provides the networking solutions. Not only does this save the associated setup and management costs, it simplifies your ongoing maintenance needs.

### With Azure Virtual Desktop:

- Microsoft-managed brokering and networking saves you setup time and resources
- Existing users are migrated easily via their Windows and Microsoft 365 user profiles

## Simplify Security

To many of us, the idea of a desktop on a public internet, accessible from potentially any device, might well sound like an alarming prospect. Yet Azure Virtual Desktop provides more security controls than you might expect, alongside crucial backend protections entirely managed by Microsoft and FITTS.

### Azure Backup

Azure backup provides comprehensive backup of everything in your Azure environment, including databases and virtual machines. It also offers protection for on-prem files, folders and snapshots.

### Azure Security Centre

Azure's Security Centre provides feedback on your current security setup, highlighting and suggesting fixes for any gaps in policies and processes.

### Azure Firewall

Once any network security policies are set out, Azure Firewall begins offering expansive and customisable protection, including support for 'Zero-Trust' policies which block any traffic from unrecognised or unauthorised networks.

### Microsoft Intune & Endpoint Manager

Whether users connect to AVD via workplace or personal devices, Microsoft Intune ensures they comply to security policies on a hardware level. This includes the option to remove data immediately from your compromised or stolen devices.

### Multi Factor Authentication

AVD provides extra secure Multi-Factor access, identifying users and their devices as opposed to just their login details. The process is further simplified thanks to AVD's enhanced integration for Azure Active Directory.

### Role-Based Access Control

RBAC allows admins to designate read or write privileges to individual users accessing the AVD. We'll cover how just one virtual machine can accommodate multiple users later in this eBook.

What makes AVD such a secure solution is that it is, essentially, 'homeless'; there is no one designated device, server, or user that can access it alone. This means that from every level – device, user, policy, location – everything is confirmed before connection requests are approved.

As our security concerns turn to our new Cloud-enabled solutions, it's reassuring to have a solution backed up with multiple security checks. AVD offers these with equal parts rigidity and flexibility, ensuring that few security challenges are insurmountable.

## Full Flexibility – Whatever Your Policies

AVD caters to two vital business needs; the need for rigidly prescribed working setups, and the need for flexible working environments that allow for employee innovation.

Impressively, AVD has the capacity to provide both. In any measure, you can choose to take one approach without having to forfeit the other.

### How does Azure Virtual Desktop Standardise your Workforce?

One of the reasons your company might implement a AVD is for policy and procedure purposes. Building a virtual machine allows you to create a workspace built with strictly defined rules around usage and security clearance.

Where your business may once have distributed a fleet of devices, all built to specific standards and functions, AVD eliminates the hardware entirely and provides a single setup accessible from any compatible device.

### How does Azure Virtual Desktop Provide Flexibility?

Multisession Hosting allows several of your users to connect to the same Virtual Desktop, without their settings or usage conflicting with one another.

AVD uses a software known as FSLogix, which saves an individual user's interactions with AVD into a profile bespoke to that user. When they next log on, their settings and preferences are remembered and presented to them alone, leaving the base Desktop setup untouched. This is known as 'Multisession Hosting'.

This doesn't limit users' abilities to cooperate on files, however. Because AVD supports the Microsoft 365 suite of software, these can still be accessed via the user's Virtual Desktop and worked on collaboratively, as they always have been. The Virtual Desktop provides incredibly powerful designation of shared and user-specific data, with everything else prescribed by your company policies.

### How Does Azure Virtual Desktop Nurture Continuity?

By virtue of being a Cloud-based desktop, the AVD is another recovery point option to help minimise the impact of downtime. For example, if a workplace incident damaged on-prem servers or networks, a virtualised desktop could be rolled out to users, who can access it from any device or HTML5-capable browser.

Of course, this is a more drastic example; AVD also offers continuity in much the same way Microsoft services such as 365, Teams and SharePoint do. It's accessible anywhere, at any time, from any device, virtualising these other applications and providing the full functionality of a Windows 10 environment.

# Let Microsoft Tackle the Managing and Monitoring

AVD provides Microsoft's most rapid-delivery virtual desktop solution yet, with the 'Quickstart' tool designed to shorten the process to literal minutes. If you've ever grappled with Windows Remote Desktop Services in the past, you might welcome AVD's much simpler approach.

Previously, setting up and managing a Remote Desktop environment was a laborious undertaking. How does AVD streamline the remote desktop process, and what are the end benefits for you, the end user?



# What does Microsoft Manage?

Microsoft covers almost the entire infrastructure of a user's Virtual Desktop environment, including **Storage, Networking, Computing, Diagnostics, Load Balancing and Brokering**. All that's left to manage are your users and your virtual machines – something we at FITTS are happy to assist with.

Below are just some of the ways AVD streamlines the setup and management of your Virtual Desktop.

	Azure Virtual Desktop	Remote Desktop Server
<b>OS Installation</b>	Provided and managed by Microsoft	Responsibility of you or your MSP
<b>Virtual Machine Construction</b>	Provided and managed by Microsoft	Responsibility of you or your MSP
<b>Upgrades</b>	Provided and managed by Microsoft	Responsibility of you or your MSP
<b>Service Support</b>	Supported by Microsoft's PaaS and IaaS solutions	Stand-alone virtual desktop solution
<b>Windows 10 Multisession Hosting</b>	Exclusive to AVD	Not available
<b>User Profile Managing</b>	Exclusive to AVD	Not available
<b>Licensing</b>	Available as standard with multiple M365 Enterprise, Pro Plus or RDS/CAL licenses	Separate purchase required for Windows Server OS as well as RDS access.
<b>Monthly Costs</b>	Paid for with M365 license, starting at \$7/user per month	Standalone license \$6
<b>OneDrive</b>	Supported	Not supported
<b>Scalability</b>	Supported by Microsoft's PaaS and IaaS solutions	Responsibility of you and/or your customer
<b>Microsoft Teams Compatibility</b>	Supported	Limited / Not Viable

# Cutting Costs

As with any new technical investment, you'll want to see Azure Virtual Desktop deliver a true return on investment. So what is the immediate cost-cutting potential of AVD?

## Licensing

If you're already versed in Windows or Microsoft 365, you're already prepared for AVD. The service is free with most Microsoft 365 Enterprise or Windows Enterprise per-user licenses, without any additional licensing costs. That means no need to license a Remote Desktop Server, nor the Windows Server OS (although AVD is offered free with that, too).

Interestingly, while support for the Windows 7 operating Systems is officially concluded, Microsoft offers a virtualised option, promising security support until January 2023. Note that this is provided more for transitioning to newer operating systems than as extended Windows 7 support, however.

Virtualised Operating System	Available With:
Windows 10 Enterprise (Including Multi-Session)	Microsoft 365 Enterprise E3, E5, A3, A5, F3 and Business Premium Windows E3, A5, A3 and A5
Windows 7 Enterprise	Microsoft 365 E3, E5, A3, A5, F3 and Business Premium Windows E3, E5, A3 and A5.
Windows Server 2012 R2, 2016 and 2019	RDS CAL, including Software Assurance

## Remote Working Hardware

Not all devices are created equal, and if you've worked almost exclusively with desktop computers, the shift to remote working will certainly need strong hardware revisions.

If you have an approved Bring Your Own Device (BYOD) policy, AVD with Microsoft Intune can verify device security and help to essentially mobilise your entire workforce, with just one virtual machine and zero hardware investments.

## Scalability

Like any good Cloud-enabled service, AVD is no 'one-and-done' deal; the number of licenses, users and virtual machines can fluctuate over the course of your Cloud journey, and your costs will scale with them. Plus, like any virtual device delivered by Microsoft's Azure platform, you only pay for the service as and when it's in use.

## Conclusion

With AVD, you can transition into a Cloud-enabled powerhouse without sacrificing the standards of your company policy. At the same time, you work within an evolving Cloud-powered solution with minimal setup, management or monitoring. You have the fastest, most functional Cloud desktop solution at your fingertips.

However you choose to implement AVD, with the support of FITTS' industry specialists your solution is nothing less than custom-fit to perfection.

To find out more about Azure Virtual Desktop, or any of our other transformative business solutions, simply [contact us today](#).

## Next step: Azure Virtual Desktop Discovery Workshop

From a few remote users to the entire business, AVD can be an integral part of your business to continue access that LOB application from any location, whilst maintaining the highest possible security and access. All within the familiar Windows 10 environment.

### **Our AVD business discovery workshop will ascertain:**

- An understanding of business goals & objectives
- An assessment of current platforms in use and its business & people impact
- A review of any dependencies
- A sizing exercise based on requirements
- A report providing a roadmap to either optimisation of / or migration to relevant services and solutions including recommended licences and costs

### **Speak to us today to request your Azure Virtual Desktop Discovery Workshop**

Or speak to us about your bespoke cloud infrastructure requirements.

**Visit:** [Fitts.io/get-in-touch](https://fitts.io/get-in-touch) | **Email:** [hello@fitts.io](mailto:hello@fitts.io) | **Phone:** +44(0) 20 3855 0750