

Azure Virtual Desktop

The Windows Experience, from Anywhere



Welcome to Azure Virtual Desktop

Azure Virtual Desktop is your gateway to a more enabled workforce. As the modern workplace evolves and your technical demands grow, Azure Virtual Desktop offers a near-unlimited range of solutions to fit any desktop management need. Whether delivering the complete Windows experience to remote workers, or virtualising powerful hardware to support demanding workloads, Azure Virtual Desktop makes productivity possible.

On the surface, Azure Virtual Desktop (or AVD) is an online desktop no different to a Windows computer. Yet it's a flexible platform expanded by several powerful cloud technologies, serving hundreds of remote employees at once and overcoming almost any technical limitation.

As with any such transformative technology, Azure Virtual Desktop can become as complex as it is capable – but you don't need to tackle it alone. At ComputerWorld, we've implemented and managed Azure Virtual Desktop to deliver the best possible client solutions. Our specialists can help you design and implement your AVD solution with ongoing expert support.

In this eBook, we'll explore Azure Virtual Desktop as an all-round solution that economises, evolves and enables your business - entirely within the Cloud.



any unexpected downtime



What is Azure Virtual Desktop?

From the user's perspective, Azure Virtual Desktop (AVD) is exactly that; a virtualised desktop computer that sits in the cloud. Whenever users log on to AVD, they're essentially operating another device, all from the comfort of their own.

Because their virtual desktop is running the familiar Windows operating system, the barrier to entry is practically non-existent. Due to wide compatibility with both dedicated clients and modern web browsers, users can connect from a wide variety of devices including those running iOS, Android, Linux and macOS.

Virtual desktops of course are not new. From an administrative perspective, however, AVD is a far more compelling prospect. AVD is streamlining virtual desktop delivery across the entire enterprise. It's virtualising powerful hardware devices in the cloud and delivering them to users, regardless of their hardware setup or location.

AVD offers vastly improved administrative and management benefits. It offers a flexible virtual desktop solution without the need to build and maintain a physical hardware environment. However, it can still take time and experience to implement effectively. ComputerWorld has extensively-trained and accredited engineers, competent in designing and deploying fully optimised and efficient AVD solutions. Read on to learn more and if you have any questions beyond the scope of this eBook, our specialists are more than happy to help.



Windows 365 and Azure Virtual Desktop: A Distinction

Recently, Microsoft released a simplified virtual desktop solution called Windows 365. Much like AVD, it delivers a familiar Windows desktop environment available from within the cloud.

To the untrained eye, the two solutions appear to be identical; indeed, the average desktop user might not notice any difference when logging on to one or the other.

Windows 365 is a simplified, 'off-the-shelf' solution, more suited to a smaller number of users. Best viewed as a remote working enabler, it is perhaps more 'cut-down and limited' than Azure Virtual Desktop, and more suited to entry-level workloads. Administrators will have significantly less control over the setup and capabilities of Windows 365, making it more of a "point fix" solution than a highly customisable one suitable to multiple use cases like AVD.

Remember: neither option is superior. Depending on your circumstances, both AVD and Windows 365 have their cost saving, user management and deployment benefits. At ComputerWorld, we offer the advice and assistance that empowers you to make the right choice.

Windows 365

More economical for teams of 10 or less consistent remote workers

A fixed-cost pricing model on a per-user basis

Support for Windows personalised desktop

Provides local admin rights for users

Native admin via Microsoft Endpoint Manager

Users each require a dedicated Virtual Machine

Simplified selection of Virtual Machines for common office use

Azure Virtual Desktop

More economical for large teams needing multiple remote desktop environments.

Flexible pricing model based on consumption

Support for Windows 7, 10, 11 and Windows Server Multi-Session Desktop

User access rights are managed individually by admins and via Azure Active Directory

Options for Citrix, VMware and other deployment methods

Pooled desktops support multiple users and their preferences

Broader choice of hardware to meet specific system requirements



Why Azure Virtual Desktop?

AVD is a business enabler, letting you achieve whatever you need with multiple flexible solutions. As one of the most powerful and capable choices for delivering desktops from the cloud, AVD helps you meet an array of technical needs. For example:

You're Driving Business Flexibility

AVD offers a more complete Windows experience than Microsoft 365 alone. Yet the power of the cloud provides options and opportunities far beyond the average desktop computer – and can even offer more powerful hardware.

For more on Azure's Business Flexibility, see Page 6

You Want Added Security Assurance

If your business has specific or extensive security needs, AVD lets you customise the solution from the ground up to keep users, data and administrative rights strictly in line with your policies. Meanwhile, additional reassurance is provided by the knowledge that the desktops are running in Microsoft's secure data centres.

For more on Azure's Cyber Security, see Page 7

You Don't Want to Handle your IT Maintenance

ComputerWorld offers fully-managed services covering setup, configuration and maintenance of AVD. The same goes for the ongoing updates and technical maintenance, saving you both time, effort and resources.

For more on Azure's Maintenance Benefits, see page 8

You Want to Economise Your IT

Azure Virtual Desktop can help consolidate licences into a single desktop solution, while pay-per-use services lets you cut costs where dedicated hardware isn't efficient.

For more on Azure's Economic Benefits, see Page 9



Azure Virtual Desktop for Users Staying Focused and Flexible

You want your employees to work in smart and innovative ways, but at the same time you need them to work within rigid company policies. The benefit of Azure Virtual Desktop is that it provides both.

How?

You can design your virtual desktop environment with strict rules around access and privileges. Furthermore, administrators can provide access rights based on departments, groups or individuals. Anyone logging on to your Azure Virtual Desktop is subject to restrictions based on both their user profile and the underlying virtual desktop.

Where Does the User Flexibility Come In?

Azure Virtual Desktop allows users to work from anywhere, on any device, no matter the complexity of their specific needs, whilst ensuring full security compliance.



Multi-session Hosting

Multiple users can operate from a single Azure desktop, customised to their preferences without compromising the security or experience for other users.



A DR Environment

A Cloud-accessible workspace, ready to rollout if on-prem hardware or solutions are compromised.



Powerful Hardware Right Where You Need It

Connect to high powered desktops from almost any device. Even the most graphic intensive workloads are accessible from modest hardware.



Remote App Streaming

Enable Cloud-connected access to your desktop apps with Remote App Streaming – a more economical way to access your virtual software.



Provide Temporary Workspaces

Let contractors, temporary users or external partners access a controlled environment where their access and abilities are carefully regimented.



Azure-Powered Backup

Azure Backup can provide cost-effective backup and recovery functionality for your data and workloads running in AVD.

From the features above, a number of potential use case scenarios are already identifiable. For example:

- A designer can access graphic-intensive software, once capable only from high-spec devices, and operate it from a device as simple as a smartphone.
- New users, contractors and external partners can be added quickly to a pooled desktop environment, with consumption costs scaled for the extra workload.

An external partner or user can quickly join and work within a shared workplace without fear of triggering a data breach, their admin privileges being configured on a per-user level.



Enhancing Security

Rapidly, more users and businesses are making their move to the cloud. So too are the criminals that seek to exploit them.

Because Azure Virtual Desktop is built using a number of principal Microsoft building blocks there are a variety of security possibilities and considerations. It is important that time is taken to carefully consider the right security configuration for your organisation from the Azure environment through to Windows, apps and data.

With the right setup, Azure Virtual Desktop brings your Windows protections together, consolidates your user workloads and devices, and provides far broader security solutions than before. For companies with bespoke security demands, it's an accomplished protective solution – and one that we at ComputerWorld can help to set up effectively.

It's because of this, ComputerWorld covers all aspects of your Azure Virtual Desktop security, including:

Microsoft Modern Management

We consolidate your Azure-accessible desktops and join them into Azure Active Directory, collating your users, their desktops and their access rights. Our Modern Management keeps everything consistent and compatible.

Windows Desktops

We ensure your virtual Windows 10 security solutions, such as Defender, are deployed to meet your needs, configurations and policies. We set up your virtual environment to be even better protected than your on-prem solutions.

Microsoft Azure

We maximise the security solutions of your Azure platform, while offering optional Managed Services that proactively monitor and protect your workflows. Azure offers a wealth of additional protective features, and we leverage them wherever they're needed most.

Microsoft 365

We'll ensure your Microsoft 365 solutions integrate seamlessly into your Azure environment, including all your associated SaaS protections, data and applications. Your productive, communicative and collaborative potential is more effective than ever.



Your Desktop Infrastructure - Managed

Azure Virtual Desktop follows a shared responsibility model, with Microsoft covering the underlying technical infrastructure and you (or your service provider) managing the Azure Virtual Desktop environment: the processes, applications and updates. This ensures that deployment is simple and performance maximised, helping you save time on maintaining the required infrastructure.

Web Access & Broker

Safe storage of your
Azure Virtual Desktop
files and environment

Client-server
connections

Safe storage of your
Azure Virtual Desktop
files and environment

Hardware patches
and upgrades

Managed Gateway
& Diagnostics

Traditional virtual desktop solutions, like Microsoft Remote Desktop Services and VMware Horizon, needed the underlying infrastructure to be serviced and maintained. However, Azure Virtual Desktop's entire underlying infrastructure is managed as a Platform as a Service solution.

	Azure Virtual Desktop	Remote Desktop Services
Modernisation and Future-Proofing	Modern, ever-evolving Microsoft technology	Legacy technology, however, market-tested with longevity
Desktop Availability & Connectivity	Allows for native Windows desktop with multiple sessions	Provides Windows 'desktop experience' only with Server OS with RDS
User Profiling	Profile management with FSLogix profile containerisation	Profile management with User Profile Disks or native profiling
Control Plane Management	Control plane and management components hosted and managed by Microsoft	RDS 'control plane' is managed by the IT administrator
Advanced Index Searching	Supports OneDrive and Indexed Search in pooled desktops	More complex in RDS collections
Licensing	Simplified licensing	Complex licensing with CAL requirements

Azure Virtual Desktop provides a more modern, bespoke cloud solution designed for today's cloud-ready business; RDS solutions are still utilised by many organisations but are considered a legacy technology. At ComputerWorld we are able to advise on all your desktop delivery options from physical devices through to VDI and AVD.



Economising with Azure Virtual Desktop

There's potential for considerable return on investment with Azure Virtual Desktop. Some of those benefits might be immediate, such as saving on hardware investments, while others will become apparent over time, such as the operational savings from consolidating your users' desktops into a single environment. Familiarise yourself with the benefits, and you'll identify several opportunities for lowering costs with Azure Virtual Desktop.

Licensing

Unlike Microsoft's previous Remote Desktop Services (RDS) there's no separate purchase required for the Windows Server OS or RDS access. User licences from most M365 Enterprise packages are eligible, and the same applies if you're already using Windows Server OS.

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 Enterprise 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



Consumption Costs

The ability to pay for resources only when they are utilised allows AVD admins to have more granular control over costs. This might benefit businesses who don't always need their desktops available 24x7 or when there are specialised high cost desktops that are only needed occasionally. Admins can provide the operating capacity as and when they need it, and have desktops shut down automatically when not in use, or outside of core working hours.

This kind of flexibility can help lessen running costs. However careful attention is needed to the configuration to avoid misconfiguration that could do quite the opposite.

It's here that an IT expert such as ComputerWorld can help you configure your setup correctly. It's important not to overlook the cost-saving potential of AVD, and with the assistance of a dedicated IT partner, you're even more likely to make continuous savings.

Remote Working Hardware

Your company might wish to standardise desktop deployments, whilst offering users flexibility of hardware configuration to meet their needs. This might mean sourcing a whole new fleet of hardware, which isn't always practical or economical. Using Azure Virtual Desktop you can re-utilise the users existing desktops or use thin clients to allow the users to connect to the centralised AVD desktops.

Not only does this allow you to standardise the way you deploy and maintain desktops within your organisation, but also offers the users increased flexibility for using a device that meets their specific needs from any web browser or compatible device.

Scalability

AVD is a cloud-based service and, with effective scaling, could help to manage any under or overspending. Your virtual desktop can fluctuate in scope as the need for more users or more capable hardware arises, and your costs can adjust proportionately with these changes.



No need to regularly source new hardware



Cost based on service consumption per user



Virtualise prohibitively expensive devices



A single virtual desktop can serve multiple users

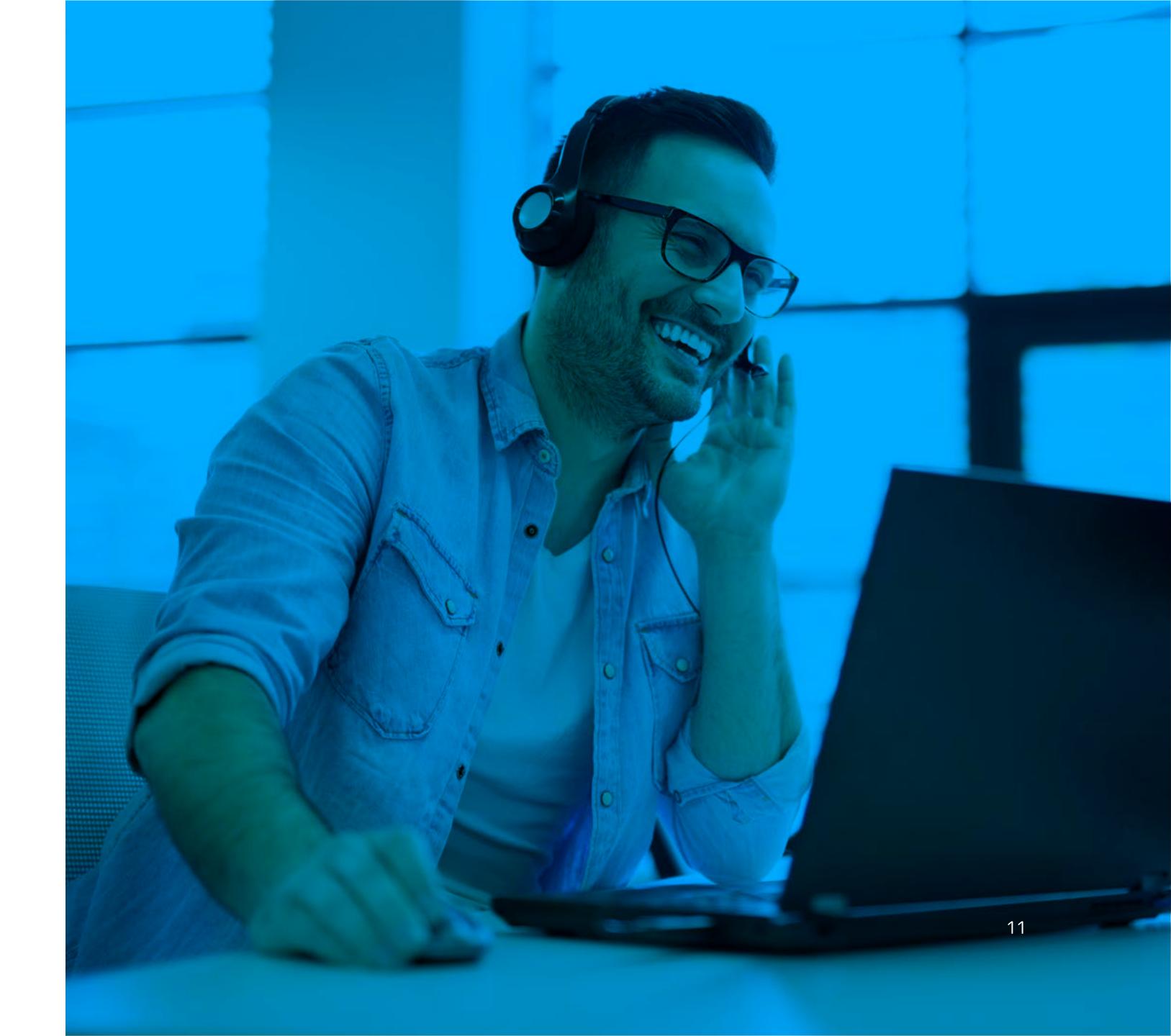


The ComputerWorld Way

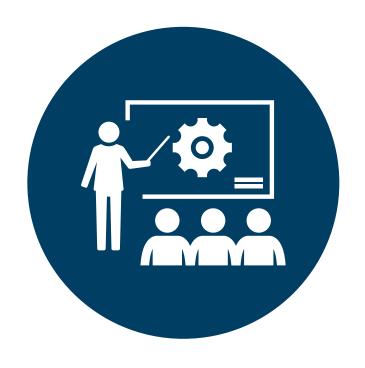
Our approach to your Azure Virtual Desktop is to work closely with your organisation and customise our services to help your business. Not only do we offer a fully outsourced model managing, maintaining and supporting your AVD, but we also offer escalation services to organisations that desire that extra added support to their in-house team.

As a specialist in Microsoft cloud adoption, we'll implement your Azure Virtual Desktop solution and ensure your teams are capable and confident with it – whatever you choose to achieve.



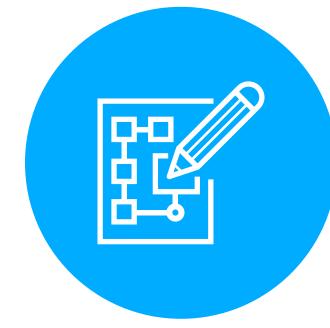


Our Azure Virtual Desktop Customer Journey



Demonstrate

We work with your key stakeholders to demonstrate the AVD functionality and how it can be configured to an organisation's needs.



Assess

We'll assess your technical and business requirements and dependencies, identify risks and design an AVD solution bespoke to your needs.



Proof of Concept

A full proof of concept will be undertaken to ensure the solution will fully meet your requirements. We'll deliver regular reviews and meetings with your company champion to refine, perfect and document any changes that are needed.



Rollout

Following reviews and refinement, we scale your AVD for Rollout. Users are trained, data is migrated and associate apps are installed.



Support

We are able to continually manage and monitor your Azure Virtual Desktop solution, actioning support tickets and working alongside champions to continually improve the services.



Maintain

From tickets, support and user feedback we continue to refine your AVD experience and monitor its optimisation.

Security is considered throughout the project





Conclusion

Azure Virtual Desktop is a true business enabler, developed with the demands of the modern enterprise in mind

- Provide flexible, yet compliant, working environments
- Enabling continuity within a cloud-secure environment
- Make security simple yet sturdy with multiple protective options
- Economising licensing, hardware and devices
- Simplify managing and monitoring with Microsoft and ComputerWorld support

At ComputerWorld, our specialists have been implementing and training users in the latest business solutions. We don't only implement our Virtual Desktop solutions, we assist your users in it, evolve its service delivery, and assess it regularly with you and your users in mind.

If you're ready to explore Azure Virtual Desktop, we're here to make it as easy as possible.



