Microsoft
Support Partners

Adobe Creative Desktops in the Azure

support
partners

Transforming Media Production

With over 16 years experience supporting and guiding the world's largest organizations in Broadcast, Advertising, Publishing, Gaming and Post-production, we know what it takes to accelerate transformation in the M&E industry.

Services

- Transformation Roadmaps
- Workflow Consultancy
- Cloud Migration Services
- Bespoke Integrations
- App Development
- Production Support
- Digital Adoption

14+ years — Est. 2004

40+ Employees

UK / New York / Phoenix

Global Support
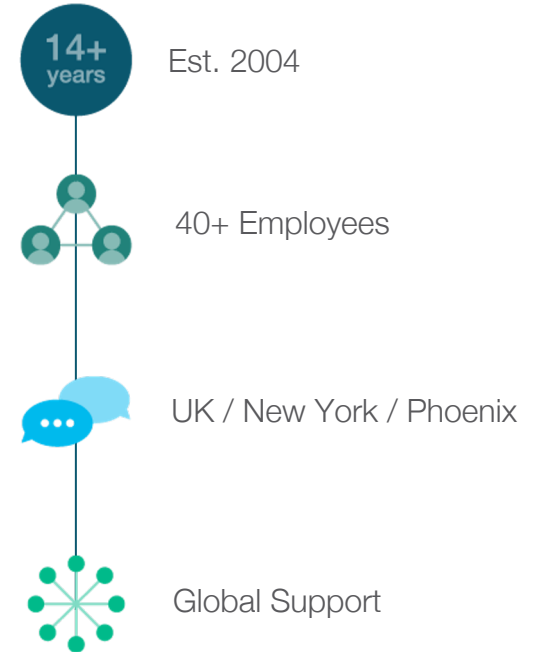
Microsoft Specialists

As a Microsoft Partner, we specialise in unlocking the value of Microsoft applications across Microsoft 365, Azure and the Power Platform, tailoring to Enterprise Media Production needs, creating a connected platform.

Services

- Business Analysis
- Data Migration
- Service Integration
- App Development
- Template Automation and Orchestration
- Data Analytics
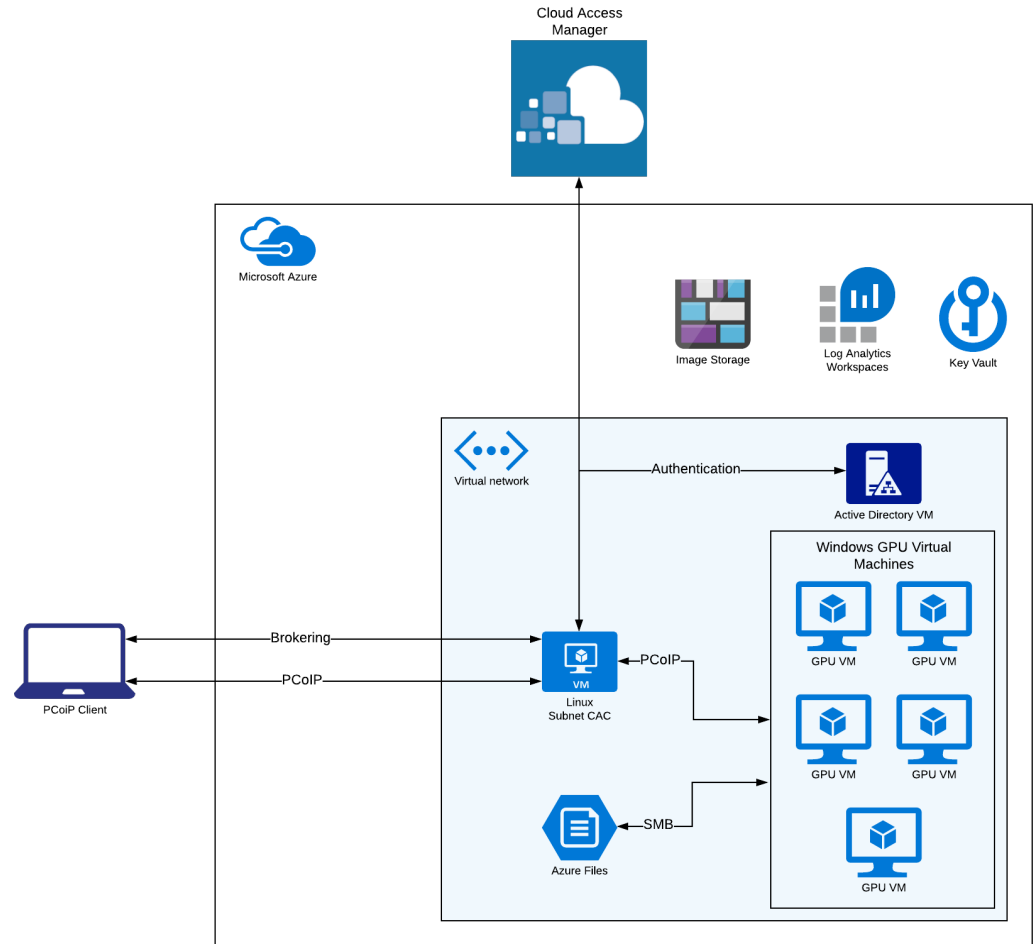- Support and Training
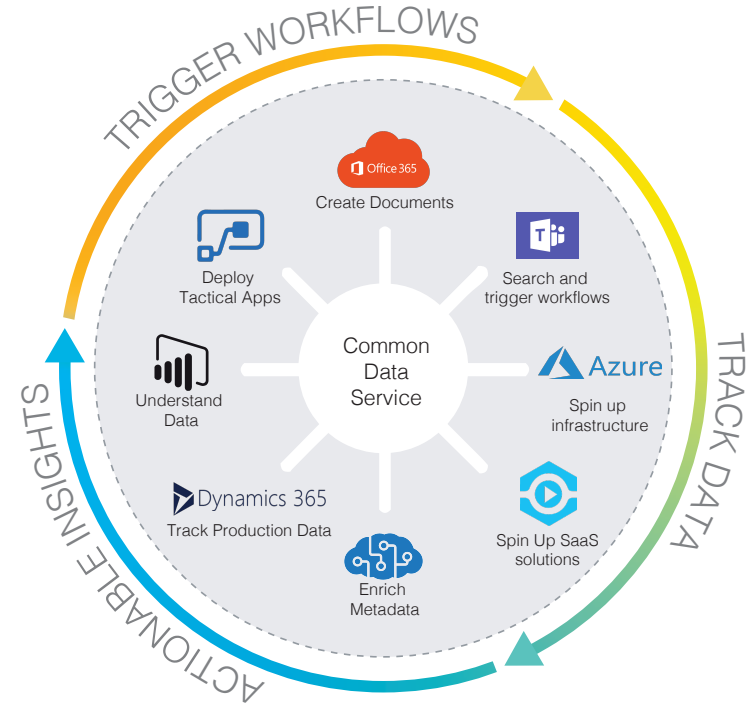
VDI Templates

What is it?

Terraform templates to deploy *in 20 minutes* small scale Adobe CC production environments in Azure cost-effectively tailored to workflow demands

Components

- **Teradici**
  - Cloud Access Manager
  - Cloud Access Connector
  - Active Directory
  - Key Vault
  - Storage Accounts

- **Compute**
  - Persona variations

- **Storage**
  - Azure FileShare

- **Networking**

- **Log Analytics Workspace**
  - Shared Dashboard
    - Cost and Performance

Components Cont.

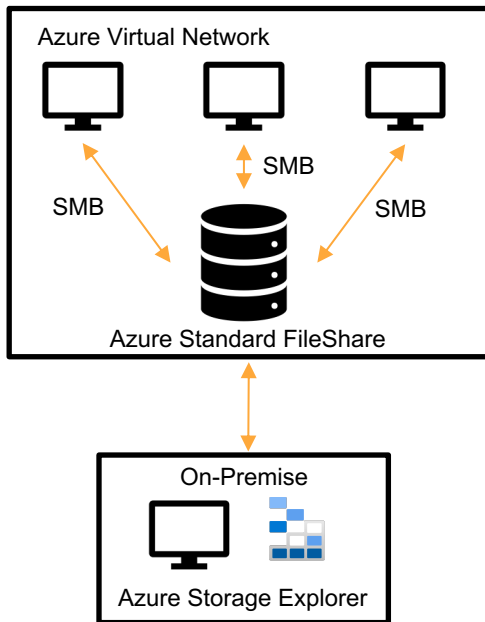| Infrastructure	- Teradici Cloud Access Manager Service - Teradici Cloud Access Manager Connector - App Registration (CAM Service Principal) - Virtual Machine - Active Directory - Virtual Machine- Cloud Access Connector - Nat Gateway - Azure File Storage - Storage - boot diagnostics - Private DNS Zone - Network Security Group - Virtual Network - GitHub Demo Asset repository
OS	- **Server:** - Active Directory- Windows Server 2016 Datacenter - Cloud Access Connector- Linux Ubuntu 18.04 LTS - Client Workstations: - Windows 10 version 2004

User Personas

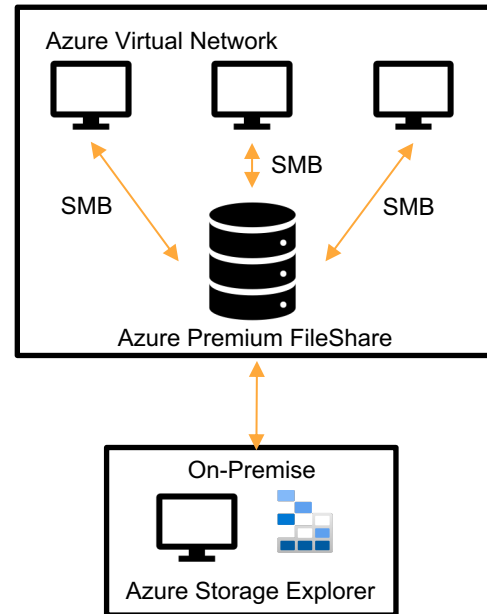| Persona 1	Persona 2	Persona 3
News/Sports/Events/Digital	Advertising/Broadcast/Studios	Promos/ High-end Advertising
NV6 instance providing 6 vCPUs (equivalent to **3**physical cores)	NV12s_v3 instance provides 12 vCPUs (equivalent to **6** physical cores),	NV24s_v3 instance provides 24 vCPUs(equivalent to **12**physical cores),
56GB of RAM	112GB of RAM	224GB of RAM
340GB of SSD storage	320GB of temporary SSD storage	640GB of temporary SSD storage
1/2 NVIDIA Tesla M60 GPU	1/2 NVIDIA Tesla M60 GPU	full NVIDIA Tesla M60 GPU

Storage – Azure FileShare

○ Azure Standard FileShare up to 20TB

○ Azure Premium FileShare up to 20TB

News/Sports/Events/Digital

Advertising/Broadcasters/Studios Promos/High-end Advertising

Azure Virtual Network

SMB

SMB

SMB

Azure Standard FileShare

On-Premise

Azure Storage Explorer

Azure Virtual Network

SMB

SMB

SMB

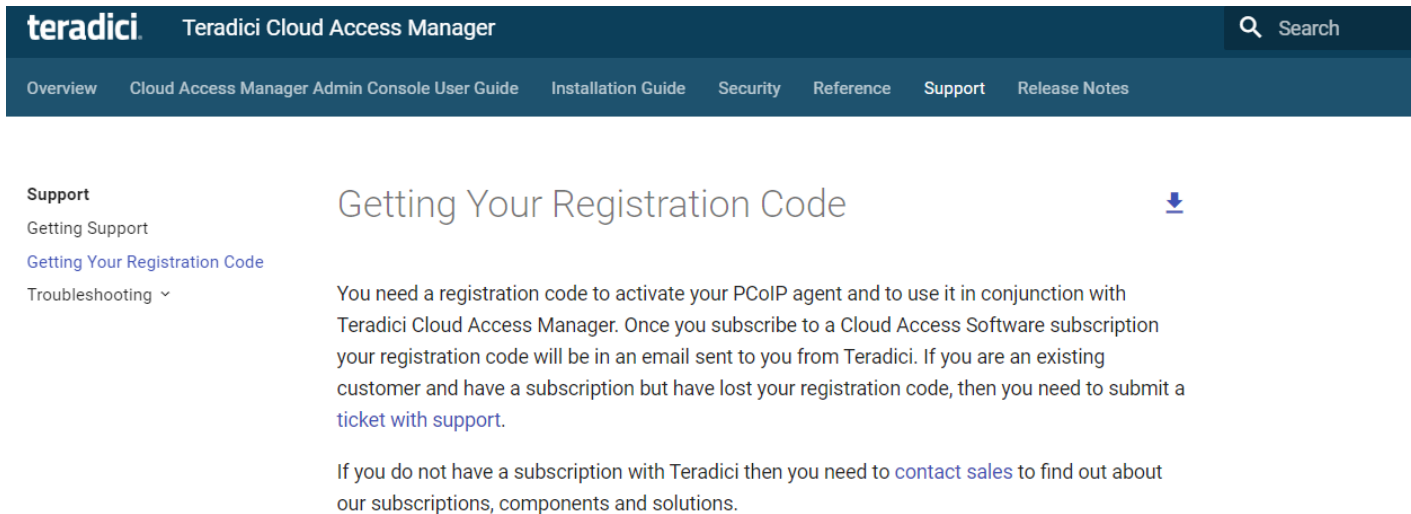Azure Premium FileShare

On-Premise

Azure Storage Explorer

Pre-requisites

1: Teradici CAM License (PCoIP registration code)

In order to begin the deployment the client will need an active Teradici subscription. This can be obtained by contacting the Teradici sales team.

More information could be found on Teradici website within the <u>support section</u>.

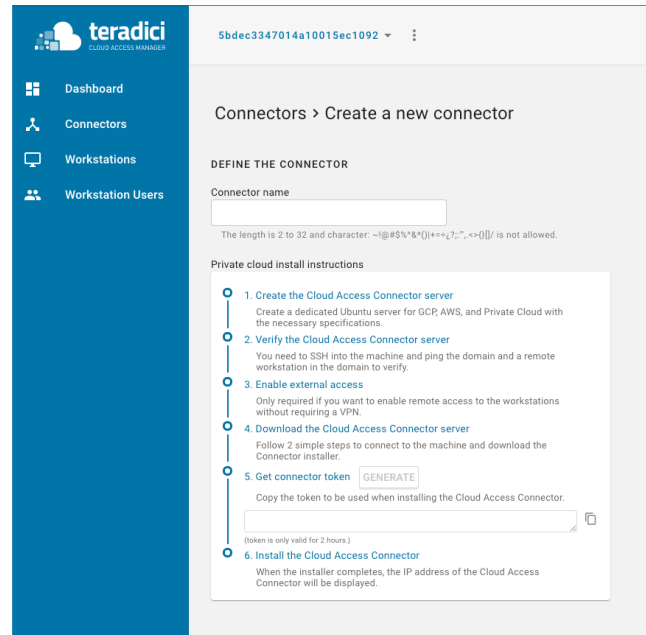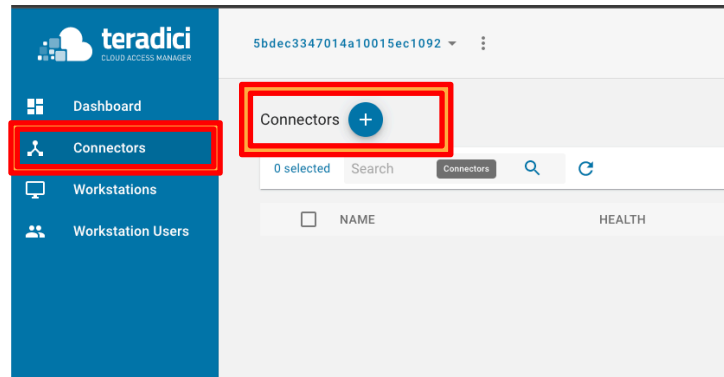# 2: Teradici CAM – Generate Connector Token

Go to https://cam.teradici.com and log in

Click on your user account in the top right of the screen

Choose 'CAM Service Account' from the drop down selector

Click '+'

Enter a friendly name for the account and click 'CREATE'

2: Teradici CAM – Generate Connector Token

Ensure you make a note of the **Username** and the **API key** when presented. You will require this later.
Example string:

{"keyId":"5f1021ef7240ed006725918b",**"username":"**5f1021ef7240ed006725918b**","apiKey":**"eyJhbGciOiJIUzUxMiIsInR5cCI6IkpXVCJ9.eyJvaWQiOiI1ZjBjYTcwY2M4Nml1YzAwMTJkYWVjYmQiLCJvd25lck9pJYR6IjE5Zjk5M2NjLTdlYTctNDJkNS1iYTc1LTA5OTY0MWJmYjg3OCIsImp0aSI6Ijk1ZDJmMDhlLWI2YTktNGGZiNC05Y2Q5LWZiM2JkZDU5YTYxOSIsImlhdCI6MTU5NDg5Mjc4NSwiZXhhwljoxNjg5NTAwNzg1fQ.1X62a0wha-yq0xeWzkxO3GkLSDa2TRdioWYL1dHMIDNC15dmspIZP7vfFdaq8PmAJnefS_kT6SULPM0—QwPpA**","keyName":"TestDeploy"}

From the API String copied out of the CAM portal you need to only use the sections highlighted in blue above

Example of how to format information for use within the Deploy script:

Username: 5f1021ef7240ed006725918b

APIkey: eyJhbGciOiJIUzUxMiIsInR5cCI6IkpXVCJ9.eyJvaWQiOiI1ZjBjYTcwY2M4Nml1YzAwMTJkYWVjYmQiLCJvd25lck9pJYR6IjE5Zjk5M2NjLTdlYTctNDJkNS1iYTc1LTA5OTY0MWJmYjg3OCIsImp0aSI6Ijk1ZDJmMDhlLWI2YTktNGGZiNC05Y2Q5LWZiM2JkZDU5YTYxOSIsImlhdCI6MTU5NDg5Mjc4NSwiZXhhwljoxNjg5NTAwNzg1fQ.1X62a0wha-yq0xeWzkxO3GkLSDa2TRdioWYL1dHMIDNC15dmspIZP7vfFdaq8PmAJnefS_kT6SULPM0—QwPpA

3: Pre-requisites: Storage Account Key

In order to access the demo assets and VM image, the script will request a storage key- this will be provided to you by Microsoft. You will be unable to successfully deploy the demo resources without this key. Please ensure you have this key available prior to deploying the script.

3: Download the Deployment Script

You have the choice of 3 scripts depending on which Persona you choose the relevant resources will be deployed. You can see what will be deployed for each persona in PersonaDetails.md

Right click on the desired persona link below and choose 'Save Link As'

Persona1 - https://github.com/AzEditorialWkGrp/VDI/raw/master/scripts/persona-1.ps1

Persona2 - https://github.com/AzEditorialWkGrp/VDI/raw/master/scripts/persona-2.ps1

Persona3 - https://github.com/AzEditorialWkGrp/VDI/raw/master/scripts/persona-3.ps1

Copy the script to **C:\temp** to avoid character limits
NOTE: This script cannot be situated too deep within subfolders else the script will error flagging a 248 character limit

Run the script from a Powershell run as current logged in user
Persona1 - C:\temp\persona-1.ps1
Persona2 - C:\temp\persona-2.ps1
Persona3 - C:\temp\persona-3.ps1

Resources for the deployment will be downloaded from GitHub into the current working directory. This includes Teraform and the dependancies required for deployment.

4: Good to Know

- **Ensure internet explorer has been run at least once and the initial setup prompt has been actioned on the machine the Deploy script is run from.**

- Ensure Powershell execution polices have been set to allow the script the run https:/go.microsoft.com/fwlink/?LinkID=135170. Example: *Set-ExecutionPolicy -ExecutionPolicy Unrestricted*

- **Install Azure CLI on the machine used to run the deployment script**

- The script will utilise the Azure CLI to authenticate you to your subscription. You can install the CLI using Microsoft Documentation https://docs.microsoft.com/en-us/cli/azure/install-azure-cli-windows?view=azure-cli-latest&tabs=azure-cli

User Requirements

Bandwidth
- Performance is dependent on home bandwidth speed of at 30Mbps download speed
- If users require 4K screen size, then 60Mbps download bandwidth will be required
- If dual monitor is required, then double the bandwidth will be required

Latency
- For a low-latency experience cloud editing experience users should be with 30ms of local data center

Security
- If testing in an office, firewall ports will need to be open

Cloud Access Software PCoIP Agents	Port	Port Number	Direction	Description
Cloud Access Software all PCoIP Agent versions (Standard & Graphics)	TCP	443	In	Client Authentication
	TCP	4172	In	PCoIP Session Establishment
	UDP	4172	In and Out	PCoIP Session Data
	TCP	60443	In	Connection Broker Communication
	TCP	443	Out	Cloud Licensing

Deploying

Start- Run .\deploy.ps1


```
PS C:\demo> .\deploy.ps1
```

Deployment Steps

1. Run the script from a Powershell run as current logged in user

NOTE: This script cannot be situated too deep within subfolders else the script will error flagging a 248 character limit
C:\path\to\deploy.ps1

You will be prompted to log into your Microsoft Azure account. This should be an account that has the correct permissions to create resources in the destination subscription.

Once authenticated you will be asked which subscription you wish to deploy.

Please choose the account number:

Type the corresponding number to the desired subscription and hit return.

2. You'll be prompted to enter your CAM PCoIP Registration code collected in Pre-Requisite

CAM PCOIP Registration code:

You'll be prompted for the CAM Service account credentials gathered in the CAM pre-requisite
- Enter the **username **and hit return
- Enter the **API Key** and hit return

Deployment Steps

You will be asked if you'd like to create a user account. Each user account created here will have a corresponding machine created. The users defined here will be created in the Active Directory. *A workstation will be created for each unique user up to a maximum of 5 workstations.*

Enter a username for the user you'd like to create
Username prompt: persona1

Enter a password for the user account
Password: <Enter Password here>

Enter a first name for the user account
First name: Persona

Enter a last name for the user account
Last name: One

Choose whether you'd like to create another account at this time
Prompt: Do you want to add a user? n

Deployment Steps

Enter your chosen password for the Active Directory Administrator account
var.ad_admin_password
Password for the Administrator user
Enter a value: <password>

Enter the Access Key for the Storage Account (please see: Pre-requisites: Storage Account Key).
var.assets_storage_account_key
Access key for storage account containing demo assets and VM images
Enter a value: <storage account key>

Enter your chosen password for the Cloud Access Connector Local Administrator account
var.cac_admin_password
Password for the Administrator of the Cloud Access Connector VM
Enter a value: <password>

Deployment Steps

Enter the Azure Region where you would like to deploy the resources

var.location

The Azure Region in which all resources in this example should be created.

Enter a value: <region>

Enter your chosen password for the Directory Services Restore Mode

var.safe_mode_admin_password

Safe Mode Admin Password (Directory Service Restore Mode - DSRM)

Enter a value: <password>

Enter your chosen password for the Local Administrator account of the deployed workstations

var.windows_std_admin_password

Password for the Administrator of the Workstation

Enter a value: <password>

Deployment Steps

You'll now be asked if you'd like to proceed. From this point on, objects will begin to be created in your Azure subscription.

```
Plan: 65 to add, 0 to change, 0 to destroy.
```

The deployment process will now begin as the Azure environment is created **(process can take approx. 20mins to complete)**

On completion the script will output the following:

```
Apply complete! Resources: 65 added, 0 changed, 0 destroyed.
```

Testing for Success

1. **Check the Teradici connector health:**

Go to https://cam.teradici.com/app/connectors

The deployed connector should be in the list as healthy for both **HEALTH** and **CERTIFICATE EXPIRY. ** Please note that once the script has completed, the Teradici connector can take an additional 15-20 minutes to complete. If the connector is reported as 'unhealthy' refresh the page after this time has elapsed.

Make note of your **External IP **that has been allocated to the connector. You'll need this to connect to a workstation in the next section

2. Check the Teradici workstation(s):

Go to https://cam.teradici.com/app/remoteWorkstations

The deployed workstation(s) should be listed. They should be marked as managed and running. When you click on a workstation it should list the users authorised (assigned) to use that workstation under the heading **MANAGE USER ENTITLEMENTS FOR WORKSTATION**

By design, there is a one-to-one mapping between users and workstations. For example; if 3 users are requested during the script deployment, 3 machines will be also created, one workstation for each user created. You will be able to review user/ workstation assignments here.

Connecting to a Workstation

To access via Teradici PCoIP client:

- Download the latest PCoIP software for your operating system here: https://docs.teradici.com/find/product/software-and-mobile-clients

- Install the application & run on your local machine

- To set up a new connection to a workstation, click on 'new connection'

- Enter in the external IP (You can get the External IP of the connector here https://cam.teradici.com/app/connectors)

- Enter connection name - This is a friendly name and can be anything the user chooses

- Hit 'save' and it will then ask you to 'connect insecurely' click 'ok'

- It will then ask you for a username and password for the workstation (This will be the user account defined in the deployment process)

The connection can take up to 5 minutes to initiate depending if the remote workstation is already running or not

Support

Included Services

- **Up to 2 hours deployment support** including the use of monitoring and logging tools to identify problems quickly and efficiently.

- **Up to 2 hours end user production support** for each client who deploys the templates to help resolve Video Production issues or to provide workflow training

- **Up to 1 hour workshop with senior consultant** to advise and discuss how the deployed solution could be scaled to a production environment this would include:

  o   Operational workflow support from ingest through editing and publishing.

  o   Infrastructure advice for deploying a Virtual Desktop Infrastructure

  o   Security compliance and authentication integrations

  o   Budget advice and cost management

  o   Integration services with client systems

For all support contact: support@support-partners.com

Tailored VDI Support

If the PoC is successful and it is decided to transition to production, Support Partners can tailor support services to meet any internal skills gaps. Our offering is typically split into 3 models:
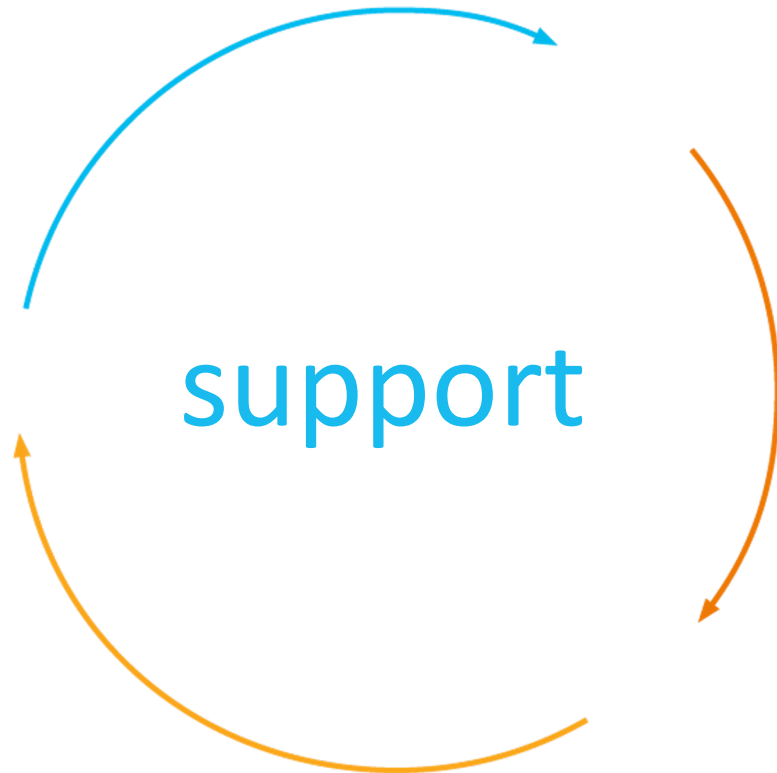
Full Handover

We design, deploy and then handover to your internal support team.

Hybrid-Support

We design, deploy and then providing 2nd and 3rd line support.

Managed Service

Fully managed service, providing 24/7 support.

support

Post PoC - Transition to Production

Support Partners Catalyst Program fast-tracks VDI deployment by providing a clear framework and governance to transition from pilot to production in compressed time frames.

Week 1	Week 2 Week 3	Week 4 Week 5	Week 6 Week 7	Week 8 Week 9
Pilot			Production	
Define	Design	Deploy	Design	Deploy
Envisioning Workshop	Solution Architecture	User Acceptance Testing	Gap Analysis	Training
User Personas & Workflows	Image Creation	Hyper-Support	Template Creation	Measure Success
Business Value	Security & Compliance	Training	High-Availability	BAU Support