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### **About Esther Barthel**

#### **Focus**

Cloud DevOps Engineer/IT Process Automation













From

The Netherlands



https://www.cloud-devops.ninja/



### **Certifications**







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#### **Contact**

@virtuEs\_IT github.com/cloud-devops-ninja

### **About Freek Berson**

www.wpninjas.eu #WPNinjaS

### **Focus**

End User Computing, Infrastructure as Code











From

The Netherlands



Themicrosoftplatform.net



### **Certifications**



### **Books**

- Getting started with Bicep
- RDS The Complete Guide





#### **Contact**

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**Key takeaways:** 

attach for AVD

Get up to speed on app

Learn when and how to use it

### **Application delivery solutions for AVD**

What are the options

### **Evolution of app attach**

App attach now and 5 years ago

### MSIX app attach vs app attach

Key differences

### App attach today

More than just a name change!

### Live demo

Create, remove & update, and a touch of Bicep! 6



# Some history...



Wednesday, October 16, 2019 MSIX app attach will fundamentally change working with application landscapes on Windows Virtual Desktop!

In this article I want to explain why I believe this to be true, cover what MSIX app attach is and how it uses MSIX technology to empower administrate and images for Windows Virtual Desktop.

Full disclosure: MSIX app attach is not publicly available yet and this article is based on pre-private preview technology and testing to give you a sneak peek on what's coming.

September 30 marks a long-awaited day, Windows Virtual Desktop (WVD) reached general availability! Having been actively involved since the very early previews since almost 2 years ago, it's great to finally see the service become available for production usage! The excitement and interest for WVD is huge. When you take a closer to all the advantages WVD brings to the table you'll know why. To name a few, it allows you to be able to deliver Applications and Desktops from the Azure Cloud based on a PaaS service. It's based on Azure Active Directory (AAD) which means you can instantly leverage Conditional Access, MFA and all other benefits that come with AAD. It provides multi tenancy, an RBAC model and full separation between the WVD services and your hosts based on Reverse Connect. And, last but not least, it comes with Windows 10 Enterprise Multi-Session allowing you to publish applications and desktops based on a client OS (Windows 10) allowing multiple users to connect to the same instance to share resources and costs. This means you get the full Windows 10 look & feel, modern applications and the ability to reuse existing Application Packages that you might have in use for local clients. Best of both worlds if you ask mel For more information about WVD visit aka.ms/wvd

What did WVD change in terms of management?





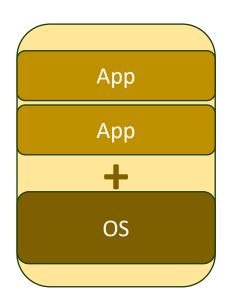
Microsoft MVP on Remote Desktop Services

Freek Berson: Freek Berson is a frequent speaker at conferences and meetups around the world and has been a Microsoft MVP since 2011. He authored the book "Getting started with Bicep", co-authored "RDS - The Complete Guide", and published the e-books "Azure Virtual Desktop Handbook: Security Fundamentals" and "Azure Virtual Desktop Migration Guide for Remote Desktop Services". He works at Corel as an evangelist and Outbound Product Manager for the Parallels team with a focus on Parallels RAS and Cloud solutions for virtual applications and desktop delivery. You can follow him on twitter via @fberson.

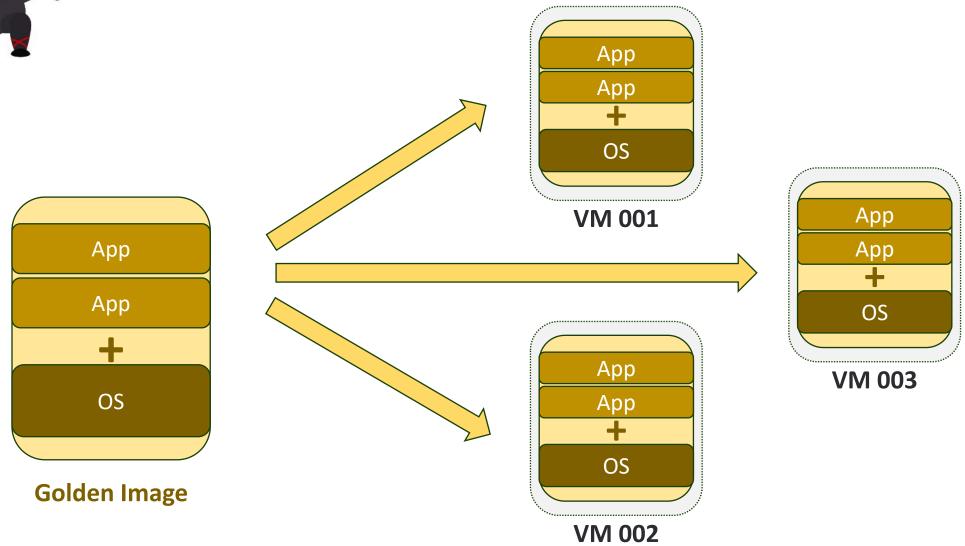
### **Bold prediction back in 2019**

MSIX app attach will fundamentally change working with application landscapes on Windows Virtual Desktop!

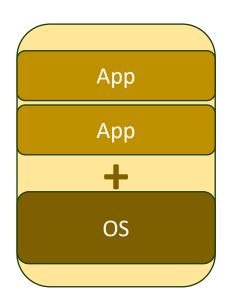
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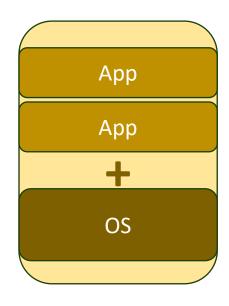
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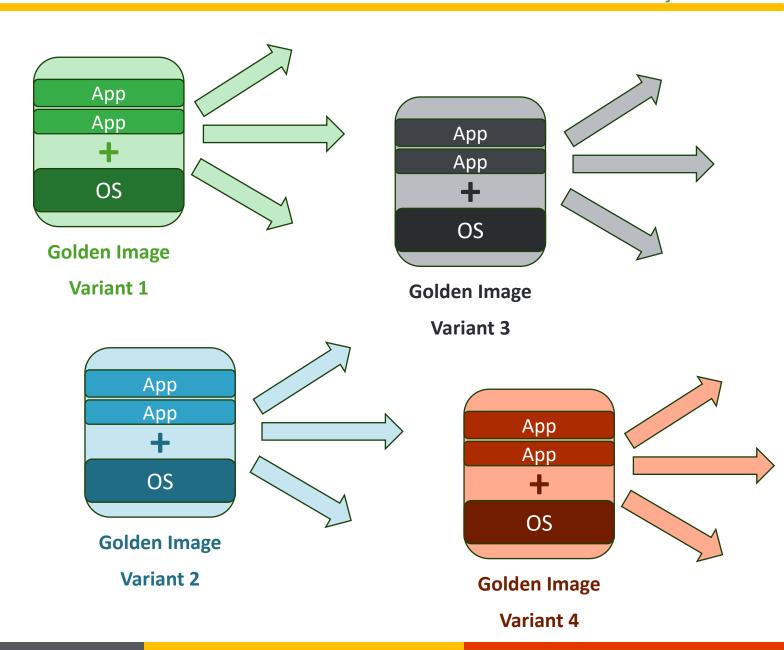
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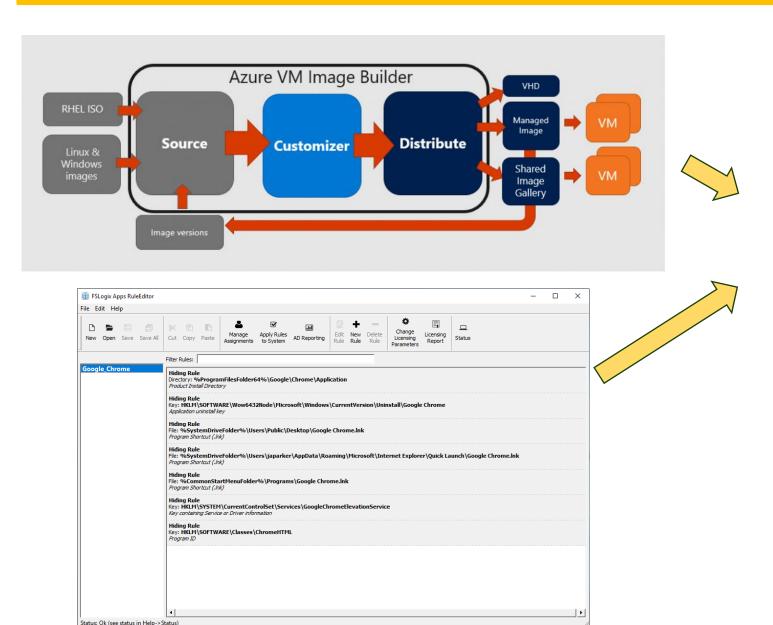


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**Golden Image** 

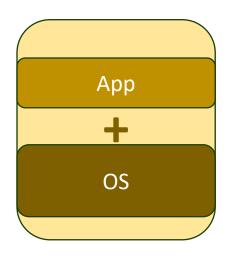






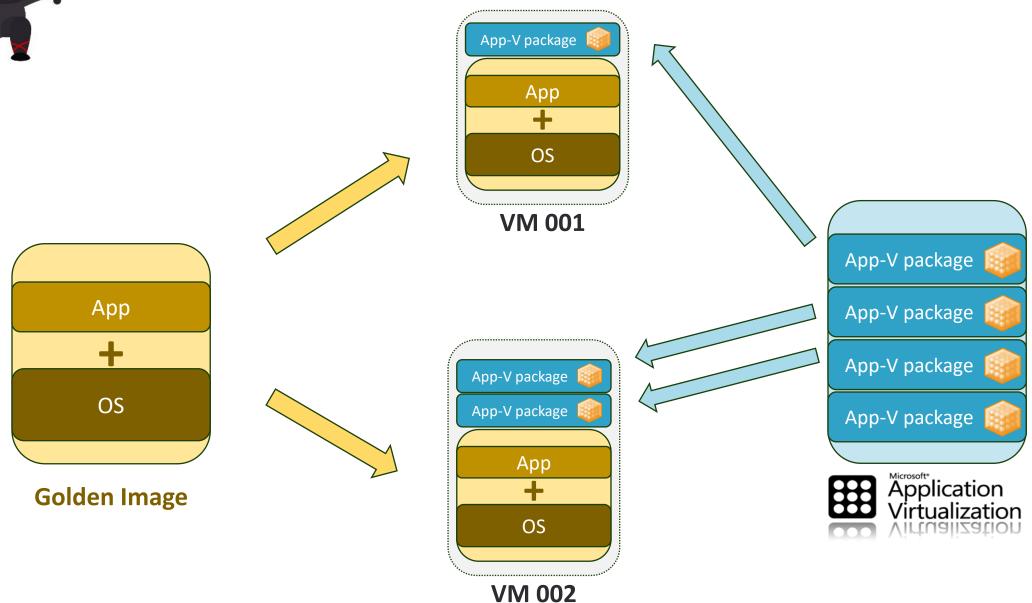
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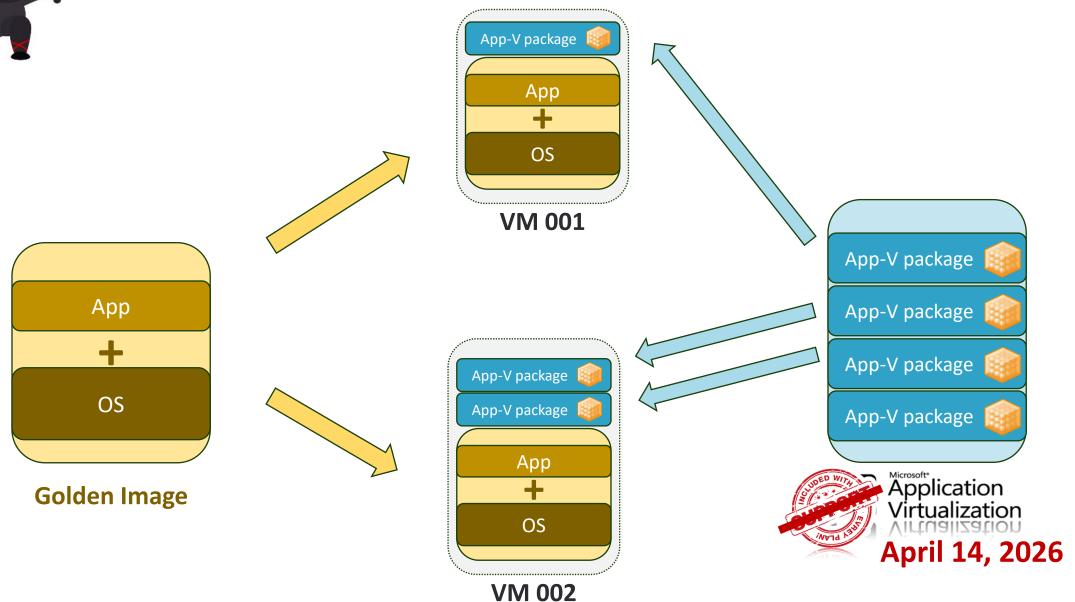


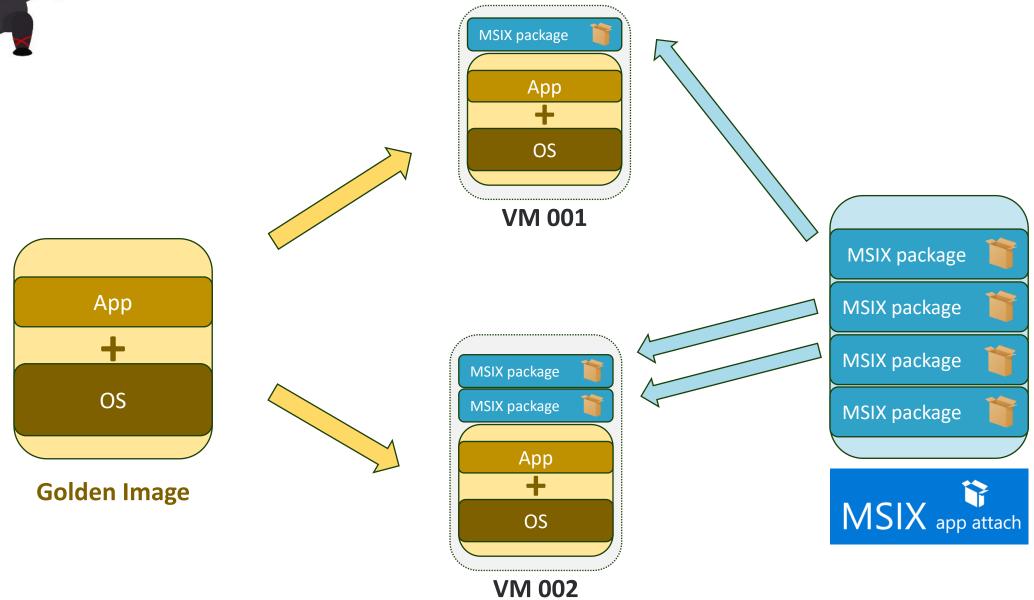


**Golden Image** 











## How to get an MSIX application?

App attach is an extracted MSIX application; it all starts with having an MSIX...

- 1. Ideally supplied by the application vendor. Microsoft leading with Edge, Teams, Notepad
- 2. Converting from MSI, EXE. MSIX Packaging tool, 3<sup>rd</sup> party like appCURE, TMEditX
- 3. Download from the public store winget download --id xxx
- 4. Package an installed application 3rd party like appCURE, Rimo3, CloudHouse



# **Evolution**





MSIX app attach PowerShell only

2019

All desktop users see all MSIX app attach application

Applications might only run on one host pool.

Applications can only run on the host pool in which they're added.

To update you must delete and recreate the application with another version of the package.

Users can't run two versions of the same application

Telemetry for usage and health is not available through Azure Log Analytics.

Desktop users only see the app attach applications assigned to them.

The same application package can be used across multiple host pools.

Apps can run on any session host running a Win client OS

Applications can be upgraded to new versions without the need for a maintenance window.

Users can run two versions of the same application concurrently on the same session host.

Telemetry for usage and health is available through Azure Log Analytics.



### Few other support statements

| Package type         | File formats      | Feature availability          |
|----------------------|-------------------|-------------------------------|
| MSIX and MSIX bundle | .msix .msixbundle | MSIX app attach<br>App attach |
| Appx and Appx bundle | .appx             | App attach only               |

| Identity provider                        | Status        |
|--|---------------|
| Microsoft Entra ID                       | Supported     |
| Active Directory Domain Services (AD DS) | Supported     |
| Microsoft Entra Domain Services          | Not supported |

| Metric               | VHD                      | CimFS        |
|----------------------|--------------------------|--------------|
| Average mount time   | 356 ms                   | 255 ms       |
| Average unmount time | 1615 ms                  | 36 ms        |
| Memory consumption   | 6% (of 8 GB)             | 2% (of 8 GB) |
| CPU (count spike)    | Maxed out multiple times | No effect    |

MSIX is a superset of Appx, and includes e.g. PSF

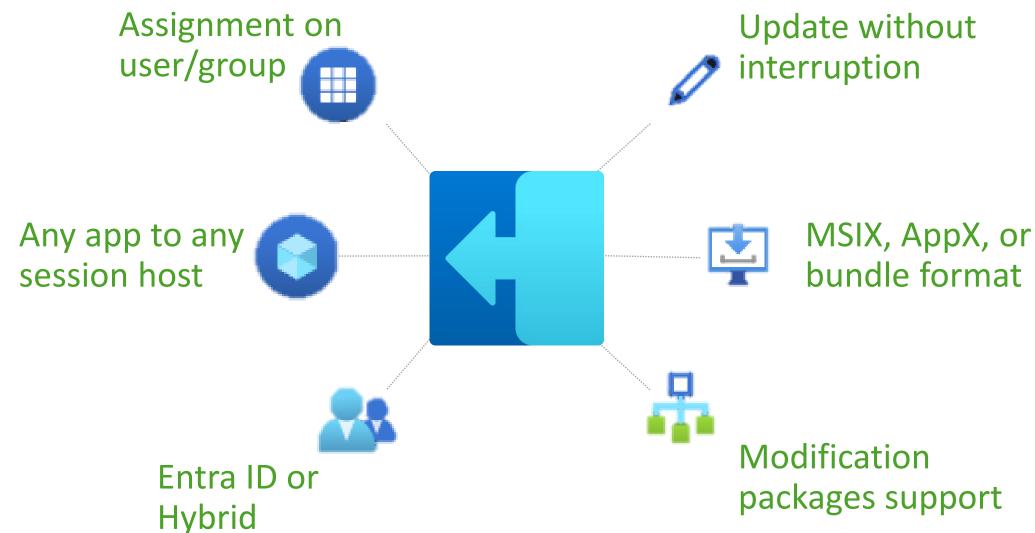
PSF is an open source kit to help applications follow the best practices of the modern runtime environment and fix issues.

Get Started with Package Support Framework

CimFS images is faster than VHD and VHDX and consumes less CPU and memory. CimFS is recommended if session hosts are Windows 11.

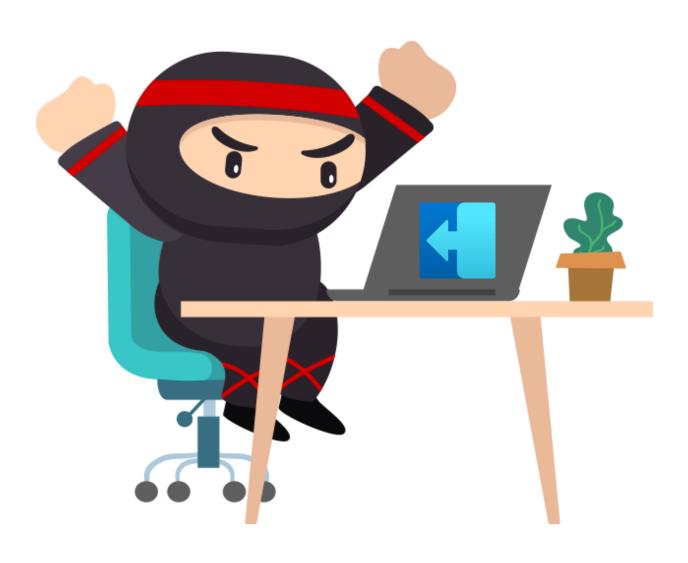
# app attach today











available through Azure Log Analytics.

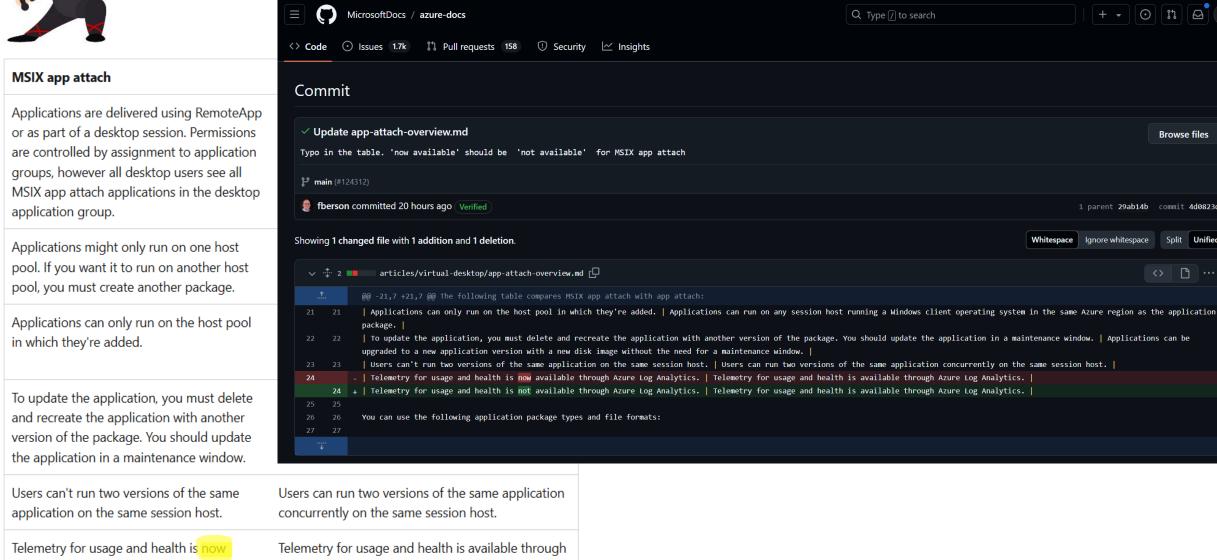
Azure Log Analytics.

# Power on contributing ©

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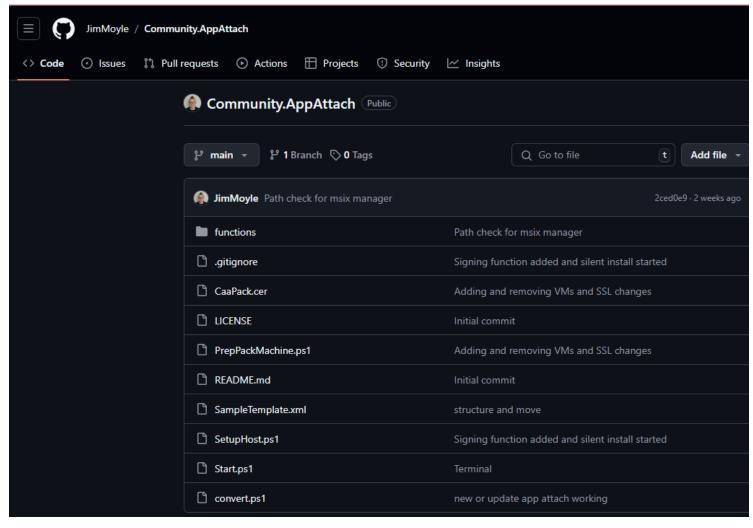
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## Shout out to Jim Moyle!





github.com/JimMoyle/Community.AppAttach

### What's next?



### Allow App-V packages to be supported by app attach

- Intended only as a migration option to
- This will not change the EOL date of App-V
- ETA: Coming Soon;)

### **Conclusion**



Does app attach fundamentally change application delivery for AVD?

Is app attach the one solution that rules them all?

...?





We love Feedback

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Workplace Ninja Summit 2024





**Okay Session!** 





**Thank You** 



