

BEST PRACTICES FOR DELIVERING MICROSOFT OFFICE 365 IN VMWARE HORIZON 7 WITH PUBLISHED APPLICATIONS

VMware Horizon 7 version 7.1

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Introduction

This paper discusses the use of Microsoft Office 365 in a VMware Horizon® 7 environment, including tips and best practices that can improve performance and application manageability. For information beyond the scope of this document, see [Additional Resources](#).

Purpose

This paper is to help you use VMware Horizon 7 to deliver Microsoft Office 365 ProPlus to your end users.

Intended Audience

This paper is intended for IT administrators who want to expand their use of VMware Horizon 7. Familiarity with VMware vSphere® and VMware vCenter Server® is assumed, as is familiarity with other technologies, including networking and storage in a virtual environment, Active Directory, identity management, and directory services.

What Is VMware Horizon 7?

VMware Horizon 7 is a family of desktop and application virtualization solutions designed to deliver Windows and Linux virtual desktops and published applications. Horizon 7 enables organizations to deliver virtualized or remote desktop services and applications to end users from centralized VMware vSphere servers. The VMware Horizon 7 solution includes a number of components, of which View is the main one.

Horizon 7 allows IT to deliver virtual desktops and applications, including published applications (formerly referred to as *RDS-hosted applications*), packaged applications with VMware ThinApp®, SaaS applications, and even virtualized applications from Citrix. All of this can be accessed from one digital workspace which efficiently provides end users with the resources they need.

VMware Horizon 7 Published Applications

The Horizon 7 Published Applications feature supports a variety of remote-experience features. These include everything from HTML Access to client-drive redirection, access to locally connected USB devices, file-type association, Windows media redirection, content redirection, printer redirection, location-based printing, 3D rendering, smart card authentication, and more.

Horizon 7 Published Applications can leverage the PCoIP and Blast Extreme display protocols from VMware, providing a rich user experience using zero, thin, laptop, PC, or mobile clients over LAN, WAN, or bandwidth-limited connections.

With published applications, you install applications, such as Office 365, on servers with the Microsoft Remote Desktop Session Host (RDSH) role, and entitle applications to corporate users through the Horizon 7 administration console. Once authenticated to Horizon 7, users can launch applications, save files, and use network resources from a remote RDSH server—just as if the users had the applications installed directly on their local computer, tablet, or phone.

What Is Microsoft Office 365?

Microsoft Office 365 is a service that provides secure access to the suite of Office products from the cloud. Instead of buying and installing a new version of the suite whenever you need to upgrade, the products are updated automatically so users always work with the most current versions. User-based licenses can be applied to 15 different devices: 5 mobile phones, 5 tablet-style devices, and 5 PCs or Macs. Even if the Office desktop is not installed on the device, Office 365 provides the suite of applications from the cloud through the browser. The license follows each user across devices, providing a consistent experience offline or online, across all supported devices. In addition to the familiar suite of Office products—Word, Excel, PowerPoint, and Outlook—Office 365 also includes OneDrive, Skype for Business, SharePoint, Yammer, and OneNote.

For more information, see [What is Office 365?](#) and [Microsoft Office 365 Support](#).

Configuring Office 365 ProPlus for Remote Desktop Services

This section explains how to deploy Office 365 ProPlus to a shared computer VMware Horizon 7 environment using *Remote Desktop Services* (RDS) and *Shared Computer Activation* (SCA).

- **Remote Desktop Services** – RDS is a Microsoft Windows component that allows users to access remote computers, session-based desktops, virtual desktops, applications in the data center, and virtual machines over a network connection. VMware Horizon 7 supports *Remote Desktop Session Host* (RDSH), a role in RDS. RDSH servers host the Windows applications and desktops that are accessed by remote users over the network connection.
- **Shared Computer Activation** – SCA is an activation mode used to deploy Office 365 ProPlus to multiple users sharing a single computer. A typical example of SCA is the deployment of Office 365 ProPlus using RDS, which enables multiple users to access and run Office 365 ProPlus programs simultaneously on remote computers.

Note: Use SCA for multiple users sharing the same machine, whether physical or virtual. For multiple users assigned individual computers, such as dedicated Horizon 7 desktops, you can use the standard Microsoft install media with a product key to install Office 365 ProPlus, as you would with traditional endpoint desktops.

The main areas of consideration are as follows:

- [Requirements for Using RDS with Office 365 ProPlus](#)
- [Using the Office 2016 Deployment Tool](#)
- [Enabling Shared Computer Activation on RDS](#)
- [Understanding How Shared Computer Activation Works](#)
- [Installing Office 365 on a Horizon RDS Server](#)
- [Considerations for Deploying Office 365 ProPlus to an RDS Environment](#)
- [Enhancing the Office 365 ProPlus Deployment](#)

Requirements for Using RDS with Office 365 ProPlus

To use RDS when you deploy Office 365 ProPlus with Horizon 7, you must meet the following basic requirements:

- An [Office 365 plan](#) that includes Office 365 ProPlus
- One of the following versions of the [Office Deployment Tool](#), which is available on the Microsoft Download Center:
 - [Office Deployment Tool \(Office 2013 version\)](#)
 - [Office Deployment Tool \(Office 2016 version\)](#)
- Office 365 ProPlus version 15.0.4631.1002 or later
 - You can download the [Office 365 ProPlus software](#) to your local network using the [Office Deployment Tool](#).
 - Office 365 ProPlus is available in a 32-bit and a 64-bit version, and either version can be used with RDS.
- A supported version of [VMware Horizon 7](#)
- A supported version of RDS:
 - Windows Server 2008 R2
 - Windows Server 2012
 - Windows Server 2012 R2

- A reliable network connection between the RDS systems and the Internet
 - The Office Licensing Service, a component of Office 365 ProPlus, issues temporary activation licenses to RDS machines when the user is authenticated. The RDS systems contact the Office Licensing Service through the Internet to obtain a license for each Office 365 ProPlus user. The connection requires Internet connectivity to obtain the license, as well as to renew it, which occurs every few days. Other programs, such as Outlook, require connectivity to communicate with Exchange provided by Office 365 services. You also need the Internet to download or update Office 365 ProPlus.

Using the Office 2016 Deployment Tool

It is recommended that you use the [Office 2016 Deployment Tool \(ODT\)](#), a Microsoft management technology for installation and configuration. You can use the ODT to download the install media, configure SCA mode, configure which languages to install, determine which products to install and which to exclude, set up automatic updates, and more. You make these configurations by modifying the XML file that the ODT accesses during setup. The ODT uses Click-to-Run, a Microsoft technology for installing and updating Office products.

- [Office 365 ProPlus Click-to-Run](#)
- [Using the Office 365 ProPlus Configuration XML Editor](#)

Office 365 ProPlus Click-to-Run

[Click-to-Run](#) is a Microsoft technology to expedite the processes of installing and updating Office products. Using Click-to-Run technology, installations can be performed on demand, and remotely from the Internet. However, Click-to-Run cannot be used with RDS or pooled, shared machines. Instead, you must first download the install content to a local network share. Next, install it to the RDS machines. Finally, you can use Click-to-Run technology to install Office 365 ProPlus on the local machines.

As with traditional Office deployments using MSI-based installations, Office 365 Click-to-Run is not available for Microsoft Volume Licensing and can be only downloaded by the ODT.

Using the Office 365 ProPlus Configuration XML Editor

Your configuration choices are stored in the Office 365 ProPlus Configuration XML Editor, which the Office 2016 Deployment Tool uses during installation. The following examples were created with the [Office 365 ProPlus Configuration XML Editor](#), and show the difference between an installation with RDS and an installation without RDS.

The examples provide a two-step approach for configuring Office 365 ProPlus in an RDS environment using the [Office 365 ProPlus Configuration XML Editor](#). In Example A, the Office installation media is downloaded to a local network file share. In Example B, a source path is added to the configuration XML file that specifies where the Office 365 ProPlus installation media is located.

Example A: Configuration.xml file for downloading the Office bits

```
<Configuration>
  <Add OfficeClientEdition="32" Channel="Current">
    <Product ID="O365ProPlusRetail">
      <Language ID="en-us"/>
      <ExcludeApp ID="OneDrive"/>
      <ExcludeApp ID="OneNote"/>
      <ExcludeApp ID="Groove"/>
      <ExcludeApp ID="Access"/>
      <ExcludeApp ID="Publisher"/>
    </Product>
  </Add>
  <Updates Enabled="FALSE" Channel="Deferred"/>
  <Display Level="None" AcceptEULA="TRUE"/>
  <Property Name="AUTOACTIVATE" Value="1"/>
  <Property Name="FORCEAPPSHUTDOWN" Value="FALSE"/>
  <Property Name="SharedComputerLicensing" Value="1"/>
  <Property Name="PinIconsToTaskbar" Value="FALSE"/>
</Configuration>
```

Example B: Configuration.xml file for installing and configuring the Office 365 ProPlus onto RDS

```
<Configuration>
  <Add OfficeClientEdition="32" Channel="Current"
SourcePath="\\server\share\office">
    <Product ID="O365ProPlusRetail">
      <Language ID="en-us"/>
      <ExcludeApp ID="OneDrive"/>
      <ExcludeApp ID="OneNote"/>
      <ExcludeApp ID="Groove"/>
      <ExcludeApp ID="Access"/>
      <ExcludeApp ID="Publisher"/>
    </Product>
  </Add>
  <Updates Enabled="FALSE" Channel="Deferred"/>
  <Display Level="None" AcceptEULA="TRUE"/>
  <Property Name="AUTOACTIVATE" Value="1"/>
  <Property Name="FORCEAPPSHUTDOWN" Value="FALSE"/>
  <Property Name="SharedComputerLicensing" Value="1"/>
  <Property Name="PinIconsToTaskbar" Value="FALSE"/>
</Configuration>
```

Enabling Shared Computer Activation on RDS

The Office 2016 Deployment Tool and the Configuration.xml file are used to install Office 365 ProPlus on the shared computer (such as an RDS server), and to enable shared computer activation for that computer. Add the following lines when you create the Configuration.xml file:

```
<Display Level="None" AcceptEULA="True" />
<Property Name="SharedComputerLicensing" Value="1" />
```

Note: You can use Windows Group Policy Objects to override the default settings specified during installation.

For more information, see [Reference: Configuration options for the Office Deployment Tool](#).

Understanding How Shared Computer Activation Works

SCA is the activation mode to use when a virtual machine is shared among multiple users, such as with published resources on RDSH, and with floating desktop pools provisioned with VMware Instant Clone Technology or View Composer. After enabling SCA and installing Office 365 ProPlus on a shared computer (RDS system), the following sequence of events takes place for each user:

1. The user logs in to the RDS system with their account for Office 365 ProPlus.
2. The user launches an Office 365 ProPlus published application, such as Word.
3. Behind the scenes, Office 365 ProPlus contacts the Office Licensing Service through the Internet to obtain a licensing token for the user.
4. The **Activate Office** window prompts the user for their account information to verify that the user is licensed to use Office 365 ProPlus:

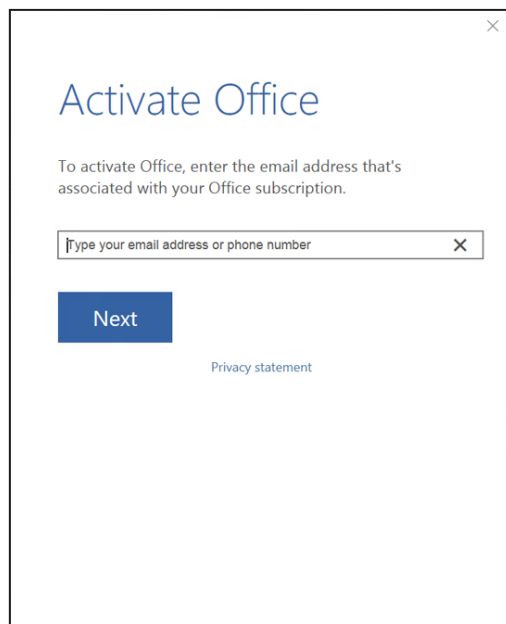


Figure 1: Microsoft Office Activation Window

Note: If the environment is configured to synchronize Office 365 ProPlus and network user accounts automatically, this step is automatic and the user is not prompted.

5. After the user account is verified, a unique licensing token is stored on the RDS system in the user's profile folder at the following location: `%localappdata%\Microsoft\Office\16.0\Licensing`
6. Office 365 ProPlus is activated for this user, and this user alone can now access the Office 365 ProPlus applications.

Note: Each licensing token is unique to that specific user, for that specific shared computer. This licensing token does not enable this user to access other computers within the RDS system. Likewise, this licensing token does not enable other users to access Office 365 ProPlus. In both cases, access is obtained by repeating the same sequence of steps.

Federation support allows for automatic activation and is configured by Windows Group Policy Objects using the Office 2016 Administrative Template files. For more information, see the [Office 2016 Administrative Template files \(ADMX/ADML\) and Office Customization Tool](#).

Installing Office 365 on a Horizon RDS Server

This section provides a high-level overview of the process of installing Office 365 ProPlus in a Horizon 7 RDS environment:

1. Install and configure Windows Server.
2. Install and configure the Remote Desktop Session Host role service.
3. Install and configure the Horizon Agent.
4. Create the **configuration.xml** files that are used to download and configure Office 365 ProPlus. Make sure the following lines are included:

```
<Display Level="None" AcceptEULA="True" />
<Property Name="SharedComputerLicensing" Value="1" />
```

5. Download Office 365 ProPlus to a file share on your local network using the Office 2016 Deployment Tool and the **configuration.xml** file.

From an elevated command prompt, run **setup.exe** using the ODT. Specify the **/download** parameter and provide a location to the XML file:

```
\\FileServer\OfficeShare\setup.exe /download \\FileServer\OfficeShare\Myconfigfile-
downloading.xml
```

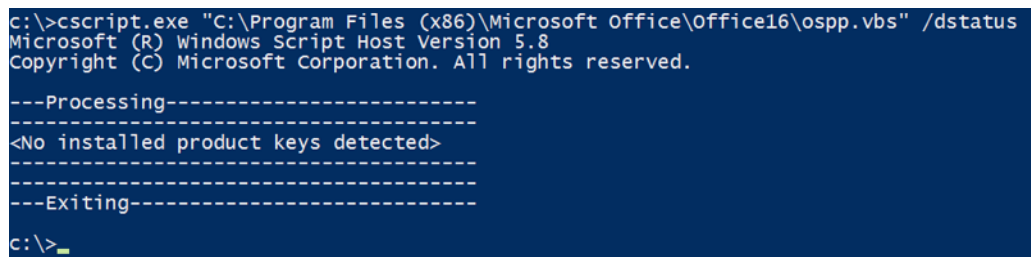
6. Install Office 365 ProPlus on the RDS server (install to the master virtual machine if using Instant Clone Technology or View Composer) using the Office 2016 Deployment Tool along with the **configuration.xml** file.

From an elevated command prompt, run **setup.exe** using the ODT. Specify the **/configure** parameter and provide a location to the **configuration.xml** file:

```
\\FileServer\OfficeShare\setup.exe /configure \\FileServer\OfficeShare\Myconfigfile-
configuring.xml
```

7. Wait until the command completes. Do not start and activate any of the Office programs at this time. The installation process can take several minutes to finish and a progress window is not displayed.
8. Verify that the Office 365 ProPlus temporary product key is not installed in the base image:

```
cscript.exe "%programfiles%\Microsoft Office\Office16\ospp.vbs" /dstatus
```



```
c:\>cscript.exe "C:\Program Files (x86)\Microsoft Office\Office16\ospp.vbs" /dstatus
Microsoft (R) Windows Script Host Version 5.8
Copyright (C) Microsoft Corporation. All rights reserved.

---Processing-----
<No installed product keys detected>
-----
---Exiting-----
c:\>_
```

Figure 2: Example of the Installation Script

Note: When installing Office 365 ProPlus as part of a base image, make sure not to activate Office 365 ProPlus prior to provisioning the RDS machines. This prevents temporary product keys from being installed during the image creation process. Users activate Office 365 ProPlus by logging in with their account credentials.

- Provision a farm of RDS servers using either Instant Clone Technology, View Composer, or manually creating them as standalone systems.

For more information, see [VMware Horizon 7 Documentation](#).

- Publish the Office 365 programs as an application pool to make them available to the user population.

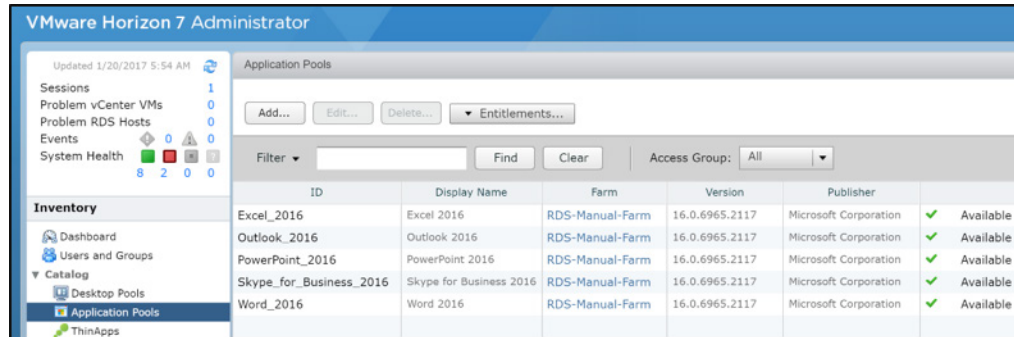


Figure 3: Example of Application Pools in VMware Horizon 7

For more information, see [VMware Horizon 7 Documentation](#).

- Optionally, configure and optimize the Office applications using VMware User Experience Manager and/or Windows Group Policy Objects.

For more information, see [VMware Horizon 7 Documentation](#).

Considerations for Deploying Office 365 ProPlus to an RDS Environment

This section provides best practices, guidelines, tips, and optimizations for your deployment.

- [Shared Computer Activation](#)
- [Microsoft Outlook](#)
- [Tips and Optimizations](#)

Shared Computer Activation

This section discusses a number of considerations when you use shared computer activation in your deployment.

- **Internet connectivity** – Because the shared computer must contact the Office Licensing Service on the Internet to obtain or renew a licensing token, reliable connectivity between the shared computer and the Internet is necessary.
- **Licensing token renewal** – The licensing token that is stored on the shared computer is valid for only a few days, whether or not the user logs in during that time. As the expiration date for the licensing token nears, Office 365 ProPlus automatically attempts to renew the licensing token while the user is logged in. After several days, the licensing token expires. The next time the user launches an Office 365 ProPlus program, Office 365 ProPlus contacts the Office Licensing Service on the Internet to get a new licensing token.
- **Reduced functionality mode** – If the user is not licensed for Office 365 ProPlus, or if the user closes the Activate Office dialog box, no licensing token is obtained. Office 365 ProPlus is not activated, and is now in reduced functionality mode. This means that the user can view and print Office 365 ProPlus documents, but cannot create or edit documents. Office 365 ProPlus displays notification that most features are turned off.

- **Activation limits** – Normally, you can install and activate Office 365 ProPlus on five computers or fewer. Using Office 365 ProPlus with SCA enabled does not count against the five-computer limit. Microsoft allows a single user to activate Office 365 ProPlus on what it considers a reasonable number of shared computers within a given time period. The user gets an error message in the unlikely event the limit is exceeded. For more information, see [Troubleshoot issues with shared computer activation for Office 365 ProPlus](#).
- **OneDrive for Business** – OneDrive for Business is not officially supported for RDSH or for nonpersistent VDI deployments. For more information, see the [OneDrive for Business sync app](#). [OneDriveMapper](#) is a PowerShell-based login script for your VDI clients and RDSH servers. It persistently maps a OneDrive for Business or SharePoint Online library to a drive letter. The script automatically maps your Office 365 account if you have ADFS, or prompts for credentials if you do not have ADFS.

Microsoft Outlook

This section describes areas of consideration when using the Outlook product within Office 365 ProPlus, in a VMware Horizon 7 environment.

The main areas of consideration are as follows:

- [Understanding Outlook Cached Exchange Mode](#)
- [Optimizing Outlook for Office 365 ProPlus and RDS](#)

Understanding Outlook Cached Exchange Mode

In most cases, Cached Exchange Mode is the recommended option for Office 365 deployments. When using a Microsoft Exchange email account on Internet connections, Cached Exchange Mode can sometimes improve performance. Cached Exchange Mode saves a local copy of your mailbox data on your computer. Outlook accesses this cached copy instead of the cloud, resulting in faster response times. The copy is updated with the same server running the Microsoft Exchange.

If your Outlook on Office 365 is running slowly, enable the Cached Exchange Mode setting to improve performance. If Cached Exchange Mode is not enabled, all of the data for operations is stored and retrieved from the cloud, which can be time-consuming and slow down performance. You can access your downloaded data even if the network connection is broken, and you can continue to work offline until your network connection is restored.

By contrast, when the default Online Mode is enabled, Outlook accesses Office 365 on an ongoing basis and does not cache anything locally.

Optimizing Outlook for Office 365 ProPlus and RDS

To optimize Outlook for Office 365 ProPlus on an RDS system:

- Use Outlook 2013 SP1 or later
- Define **Exchange Cached Mode** in Windows Group Policy Objects
- Define **OST** and **PST** paths to a local network share in Windows Group Policy Objects
- Configure **Full items or only headers** in Windows Group Policy Objects

For an example of Windows Group Policy settings, see [Figure 5](#).

Tips and Optimizations

When you use Office 365 ProPlus in a Horizon 7 environment, the following considerations may be helpful.

- Do not enable automatic updates for Office 365 when using Instant Clone Technology or View Composer. Apply updates manually to the base image. The Office updates can be configured using Group Policies and the [Office Administrative Template](#).
- Use the 32-bit version of Office 365 ProPlus unless the larger memory space is required (for example, large Excel spreadsheets). Most Office 365 ProPlus plugins are 32-bit and function best using the corresponding 32-bit version of the Office programs.
- [VMware OS Optimization Tool](#) – This tool helps optimize Windows systems for use with VMware Horizon 7. The optimization tool includes customizable templates to enable or disable Windows system services and features, per VMware recommendations and best practices, across multiple systems. Since most Windows system services are enabled by default, the optimization tool can be used to easily disable unnecessary services and features to improve performance.

Figure 4 shows the template provided for RDSH use:

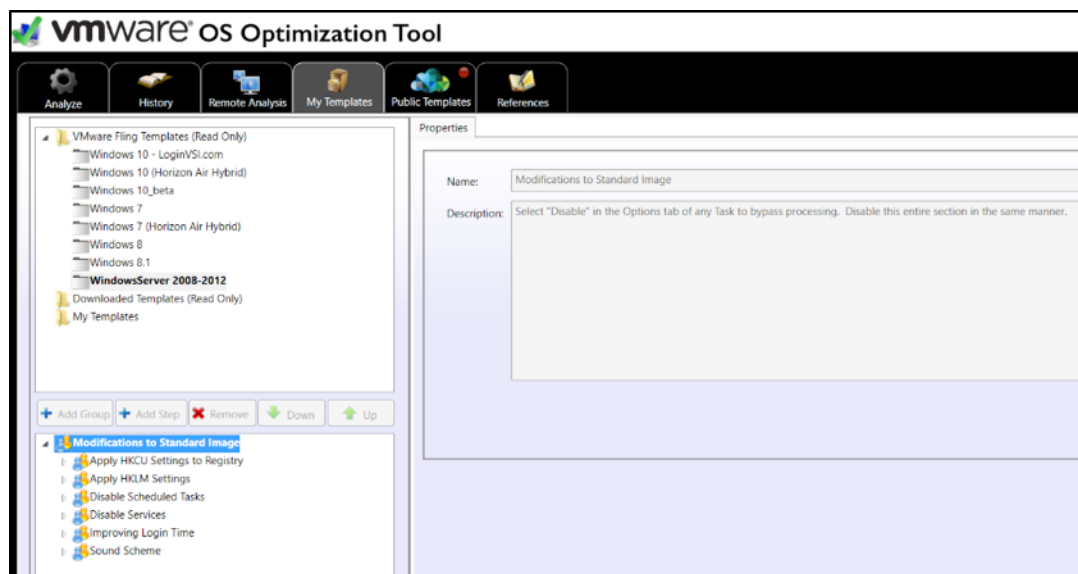


Figure 4: VMware OS Optimization Tool

- [Office 365 Client Performance Analyzer](#) – You can use this tool to identify issues that affect network performance between your company systems and Office 365 ProPlus. For example, if the connection to Office 365 ProPlus fails or is slow, you can use the tool to help troubleshoot the issue.

When testing, the Office 365 Client Performance Analyzer takes the following actions:

- Analyzes network performance from client to Office 365 ProPlus data center
- Collects DNS and ISP details
- Makes sure that all required ports are enabled
- Verifies end-user environment information (OS, browser, hardware configurations)
- Traces routes and measures bandwidth available
- Checks download times and ping statistics

- [Microsoft Office Configuration Analyzer Tool](#) – You can use this tool to analyze specific Microsoft Office programs for configurations known to be problematic.
- [Microsoft Configuration XML Editor](#) – You can use this online tool to generate and edit the `configuration.xml` file that is used by the Office 2016 Deployment Tool.
- Office Group Policy Settings – Figure 5 shows examples of Office 365 ProPlus policies that can be configured using the [Office Administrative Template](#) files.

The screenshot displays the 'Office 2016 Policy' configuration window, which is divided into several sections. At the top, there are tabs for 'Scope', 'Details', 'Settings', and 'Delegation'. The main content area is organized as follows:

- Office 2016 Policy**: Includes a timestamp 'Data collected on: 1/20/2017 4:32:32 PM' and a status 'Computer Configuration (Enabled)'.
- Policies**: A summary section for the current policy.
- Administrative Templates**: A section indicating that policy definitions (ADMX files) were retrieved from the local computer.
- Microsoft Office 2016 (Machine)/ Updates**: A table of settings for machine-level updates.

Policy	Setting
Enable Automatic Updates	Disabled
Hide option to enable or disable updates	Enabled
Update Path	Enabled
- User Configuration (Enabled)**: A section for user-level settings.
- Policies**: A summary section for user-level policies.
- Administrative Templates**: A section indicating that policy definitions (ADMX files) were retrieved from the local computer.
- Microsoft Office 2016/ First Run**: A table of settings for the first run experience.

Policy	Setting
Disable First Run Movie	Enabled
Disable Office First Run on application boot	Enabled
- Microsoft Office 2016/ Miscellaneous**: A table of miscellaneous settings.

Policy	Setting
Disable Office animations	Enabled
Disable Office Backgrounds	Enabled
Disable the Office Start screen for all Office applications	Enabled
Do not use hardware graphics acceleration	Enabled
Suppress recommended settings dialog	Enabled
- Microsoft Office 2016/ Subscription Activation**: A table of settings for subscription activation.

Policy	Setting
Automatically activate Office with federated organization credentials	Enabled
- Microsoft Outlook 2016/ Account Settings/ Exchange/ Cached Exchange Mode**: A table of settings for Outlook's cached exchange mode.

Policy	Setting
Cached Exchange Mode (File Cached Exchange Mode)	Enabled
Cached Exchange Mode Sync Settings	Enabled
Use Cached Exchange Mode for new and existing Outlook profiles	Enabled
- Microsoft Outlook 2016/ Miscellaneous/ PST Settings**: A table of settings for Outlook's PST files.

Policy	Setting
Default location for OST files	Enabled
Default location for PST files	Enabled

Figure 5: Example of Microsoft Office Group Policy Settings

Enhancing the Office 365 ProPlus Deployment

In addition to the methods described earlier, you can also enhance your Office 365 ProPlus deployment using VMware App Volumes™, VMware User Environment Manager™, and VMware Identity Manager™.

- [VMware App Volumes](#)
- [VMware User Environment Manager](#)
- [VMware Identity Manager](#)

VMware App Volumes

VMware App Volumes is a Windows application delivery and application life-cycle-management solution which can be used with Horizon 7 and RDSH virtual environments. App Volumes uses application containers called AppStacks, which are read-only virtual disks that contain all the components—such as executables and registry keys—required to run an application. When an AppStack is deployed, it does not require end-user installation, and it is available for use within seconds. You can use App Volumes to deliver native Windows applications, virtualized Windows applications such as ThinApp packages, and published applications.

App Volumes extends the manageability of Office 365 ProPlus for RDS environments with one-to-many provisioning to simplify the process of deploying, upgrading, and patching the systems.

For more information about App Volumes, see [VMware App Volumes](#) and [VMware App Volumes FAQs](#). For more information about the provisioning recipe, see [VMware App Volumes Provisioning Recipe for Microsoft Office 365](#).

VMware User Environment Manager

VMware User Environment Manager is a profile and policy management solution that supports personalization and dynamic policy configuration across virtual, physical, and cloud-based Windows desktop environments. You can use User Environment Manager to simplify policy management by replacing and unifying problematic, unmaintainable, or complex login scripts and profile logic. You can map environmental settings, such as networks and printers, and dynamically apply end-user security policies and customizations. User Environment Manager ensures that each user's settings and customizations follow that user from one location to the next, regardless of the endpoint used to access the user's resources.

After it is deployed, Office 365 ProPlus is configured and optimized for RDS environments similarly to a traditional Office deployment. Office 365 ProPlus benefits from User Environment Manager like an MSI-based Office installation does, regardless of the deployment method and service-centric model.

For more information, see [VMware User Environment Manager](#) and the [VMware User Environment Manager Deployed in 60 Minutes or Less](#) guide.

VMware Identity Manager

VMware Identity Manager is an Identity-as-a-Service (IDaaS) offering that provides application provisioning, a self-service catalog of applications and virtual desktops, conditional access controls, and single sign-on (SSO) for software-as-a-service (SaaS), web, cloud, and native mobile applications. VMware Identity Manager provides your IT team with a central location for the management of user provisioning and access policy with directory integration, identity federation, and user analytics.

VMware Identity Manager provides SSO support for Office 365 to trust the VMware Identity Manager service for authentication to the Office 365 applications. In addition, VMware Identity Manager provides federation support with the ability to configure outbound provisioning of users and groups to Azure Active Directory that is used by Office 365.

For more information, see [VMware Identity Manager](#) and [VMware Identity Manager Integration with Office 365 for Single Sign-on and Provisioning](#).

Summary

This paper provides tips to help IT administrators use VMware Horizon 7 to deliver Microsoft Office 365 ProPlus applications to end users. The paper discusses the implementation of Microsoft Office 365 ProPlus in a VMware Horizon 7 environment using the shared computer model with RDSH and SCA, and provides tips and best practices that can improve performance and application manageability.

Additional Resources

For more information about VMware Horizon 7, you can explore the following resources:

- [Licensing brief: Licensing Microsoft Office 365 ProPlus subscription service in Volume Licensing](#)
- [Microsoft Click-to-Run](#)
- [Microsoft Configuration XML Editor](#)
- [Microsoft Office 2016 Administrative Template files and Office Customization Tool](#)
- [Microsoft Office 2016 Deployment Tool](#)
- [Microsoft Office 2016 Administrative Template Files](#)
- [Microsoft Office 365 Determine the deployment method to use](#)
- [Microsoft Office 365 Identity and Azure Active Directory](#)
- [Microsoft Office 365 Client Performance Analyzer](#)
- [Microsoft Office 365 Plan Options](#)
- [Microsoft Office 365 ProPlus Configuration XML Editor](#)
- [Microsoft Office 365 Network planning and performance tuning](#)
- [Microsoft Office 365 Network and migration planning](#)
- [Microsoft Office Configuration Analyzer Tool](#)
- [Microsoft Office 365 plan](#)
- [OneDriveMapper](#)
- [OneDrive for Business sync app](#)
- [Reference: Configuration options for the Office Deployment Tool](#)
- [Reference: Download Click-to-Run for Office 365 products by using the Office Deployment Tool](#)
- [Troubleshoot issues with shared computer activation for Office 365 ProPlus](#)
- [VMware App Volumes](#)
- [VMware App Volumes FAQs](#)
- [VMware App Volumes Provisioning Recipe for Microsoft Office 365](#)
- [VMware Horizon 7](#)
- [VMware Horizon 7 Documentation](#)
- [VMware Horizon Support Center](#)
- [VMware Identity Manager](#)
- [VMware Identity Manager Integration with Office 365 for Single Sign-on and Provisioning](#)
- [VMware Knowledge Base](#)
- [VMware OS Optimization Tool](#)
- [VMware User Environment Manager](#)
- [VMware User Environment Manager Deployed in 60 Minutes or Less](#)
- [What is Office 365?](#)
- [What's New with VMware Horizon 7](#)

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