



DesktopPlayer for Windows

Getting Started

Version 2.3.0

February 2017

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About this Release

This document provides information about DesktopPlayer for Windows version 2.3.0; it includes an overview of the functionality available at this release, installation information, and general usage guidelines. Please refer to release notes for known issues at this release.



Back up your data prior to installing this product. Consider saving your data to Citrix ShareFile or any cloud-based backup service to access your data from other devices or locations.

About the Citrix DesktopPlayer for Windows Solution

Citrix DesktopPlayer for Windows extends the benefits of [desktop virtualization](#) to Windows desktop and laptop users, enabling you to work on your Windows business apps in virtual machines (VMs) whether you are online, offline, or on an intermittent network connection. DesktopPlayer end users gain freedom while IT Administrators gain control and centrally managed Windows VMs deployed to corporate and BYO Windows PCs.

With Synchronizer management infrastructure as backend, DesktopPlayer is a distributed solution that makes managing Windows VMs on thousands of Mac and PC devices as easy as managing one.

The Citrix DesktopPlayer application is classified as a level 2 hypervisor which installs on top of the Windows OS. There are a number of differences between a Type 1 and Type hypervisor; in general, in a Type 2 hypervisor:

- the host OS boots first.
- the hypervisor runs as a process or service within the host OS.
- the hypervisor uses the host OS APIs to access system resources.

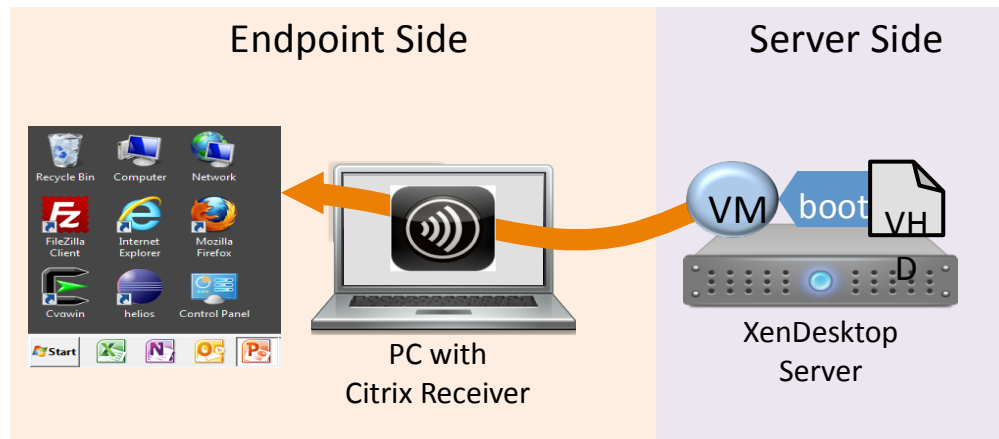
Remote versus Local Desktops

Citrix technology provides end users with a flexible approach to desktop virtualization by providing either *remote* or *local* desktops; use the information in this section to understand the differences between the two virtualization options.

Remote Desktops with XenDesktop

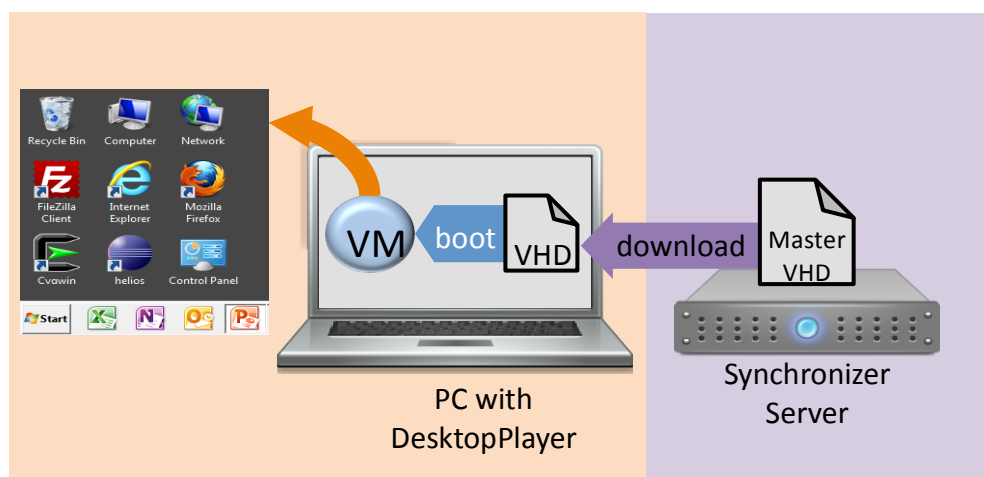
Using XenDesktop, a user's virtual machine runs on a remote server and is booted from a virtual hard drive (VHD) file. In this environment, Citrix Receiver runs the client and connects it to the remote VM; it's responsible for delivering the virtual desktop to the end user.

- i** A constant network connection is required between the end user (the client computer) and XenDesktop.



Local Desktops with DesktopPlayer

Using DesktopPlayer, a user's VM is executed locally and deployed to an Engine on the computer. This VM is centrally managed by Citrix Synchronizer which manages the VHD files for VMs deployed to the Engine. In this desktop virtualization model, DesktopPlayer downloads the VHD files and installs a local VM using the hardware elements local to the machine, namely the CPU, memory, and other resources. This model provides direct access to the desktop of the deployed VM; once the VM is deployed, it runs on the endpoint (client computer) without a network connection to Synchronizer.





A constant network connection is not required between the end user (the client computer) and Synchronizer server.

DesktopPlayer Components

The DesktopPlayer for Windows solution uses two key components to provide Windows VMs:

- DesktopPlayer for Windows, a virtualization-based client application that enables Windows VMs to run on top of the host computer and communicates with a management server (Synchronizer).
- Synchronizer, a centralized management server that controls multiple DesktopPlayer machines.

DesktopPlayer for Windows

DesktopPlayer is installed on individual computers, and provides a virtualized platform to run each Windows VM image. An image contains a virtualized representation of an operating system plus any included applications. DesktopPlayer may have more than one virtual machine image running on top of a computer, and is dependent on the available hardware resources (i.e., CPU, storage, memory) to support the multiple images.



The image definition includes its own specific RAM and storage requirements; memory management is performed by DesktopPlayer.

DesktopPlayer also performs the management tasks on the computer:

- Establishes network connections for the VM (wireless and/or wired).
- Communicates securely (through SSL) with Synchronizer and checks for updates to VMs.
- Downloads and prepares updates and new versions of VMs.



DesktopPlayer includes a highly customized version of VirtualBox (by Oracle) which it uses as a Type 2 hypervisor. This application is used for booting VMs from VHD files, VM console access, device assignment, network configuration and driver support for virtual devices in the VM. VirtualBox is bundled with the DesktopPlayer installer and requires no additional configuration.



DesktopPlayer will not install if a previous version of VirtualBox is detected on the host computer.

About Synchronizer

Synchronizer builds the VMs, manages users and groups, and assigns them to computers/users. When contacted by DesktopPlayer, Synchronizer sends down updated VMs, installed applications, or policies.



Synchronizer version 5.8 is required to manage DesktopPlayer endpoints.

Using Synchronizer, an Administrator can request information about the computer running a VM (disk use, hardware available, and diagnostics).

DesktopPlayer Features

DesktopPlayer provides a number of key features, including:

- Easy installation. Installing DesktopPlayer is simple; the single executable doesn't disrupt the existing OS and allows for seamless switching between desktops for added flexibility and productivity.
- Increased productivity. Extending the benefits of desktop virtualization to mobile users to work from anywhere, regardless of network connectivity.
- Centralized management for comprehensive IT control. With DesktopPlayer, IT is able to efficiently deploy, update, and manage virtual desktops for mobile PC users on both corporate and BYO devices. Use Citrix Synchronizer to provide centralized management capabilities, including zero-touch provisioning, one-to-many patching, and role-based policy management.
- Secure virtual desktops and protect against data loss. DesktopPlayer secures virtual desktops and reduces the risk of data loss for on-the-go mobile users with features such as virtual disk encryption, time-based lockout, expiration, and remote wipe policies.

Platform and Hardware Requirements

The table below provides requirements for host machine on which DesktopPlayer will be installed:

CPU Requirements	Intel 3 rd generation (Ivy Bridge) or newer
Memory Requirements	<ul style="list-style-type: none">• 8 GB or higher
Disk Space Requirements	<ul style="list-style-type: none">• Minimum requirements for DesktopPlayer installation:<ul style="list-style-type: none">• 100 GB minimum free disk space (SSD preferred, especially on laptop devices)

- Actual requirements may be significantly higher; it depends on the number, size, and usage of deployed VMs.
- Installing DesktopPlayer on a secondary disk is not supported.

About system memory usage

In a virtualized environment, system memory is shared between the host operating system (the computer on which DesktopPlayer was installed) and the guest operating system in the virtual machine (the Windows VM). Because this memory is shared between the guest and host:

- Operating a virtual machine on a computer with 4 GB of memory limits memory allocation to the Windows OS (guest).
- When using DesktopPlayer, consider that host operating system requires approximately 2-2.5 GB of memory for normal operation; a Windows 7 32-bit guest virtual machine requires approximately 1.5 GB of memory to perform reasonably. Running a 64-bit Windows OS will require additional memory (8 GB RAM or higher) and is not feasible on a host computer with 4 GB RAM.

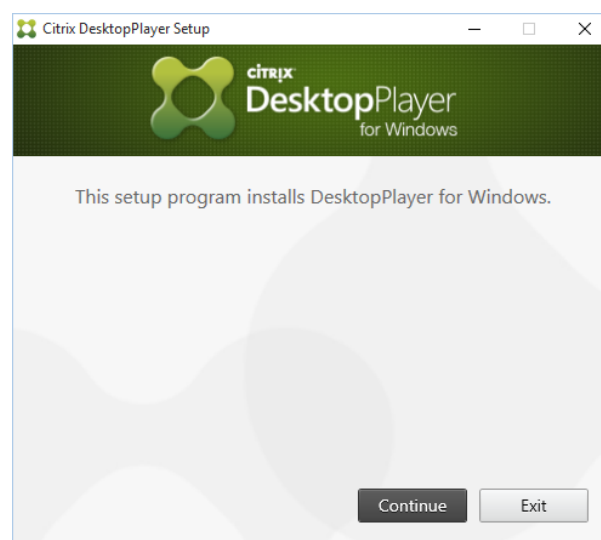


Citrix recommends computers with 8 GB RAM or higher.

Installing DesktopPlayer

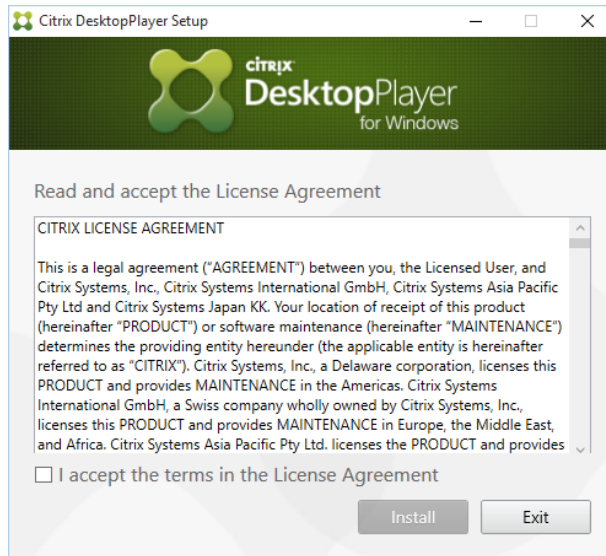
Follow the information in this section to install DesktopPlayer:

1. Double click the installer executable. Contact your IT Administrator if you do not have this installation package. The installer is a compressed file; after double clicking the icon, the DesktopPlayer installation screen appears:

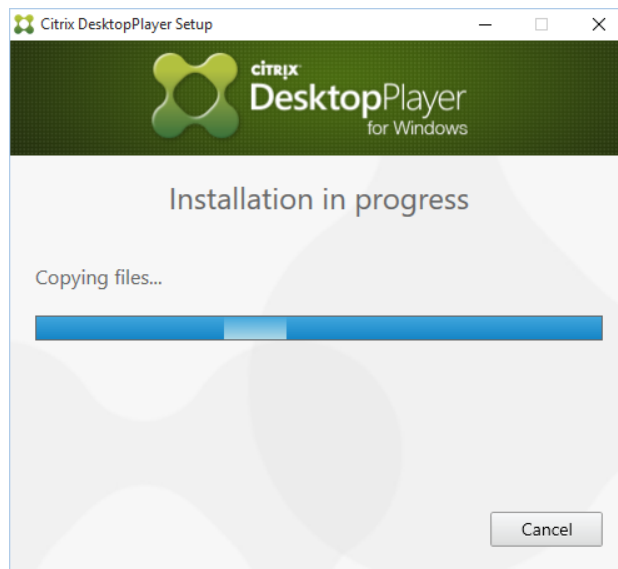


Click **Continue** to start the installation wizard.

2. Review the terms of the software license agreement for the software. Click the checkbox to accept the terms of the license , then click **Install** to proceed with the installation:



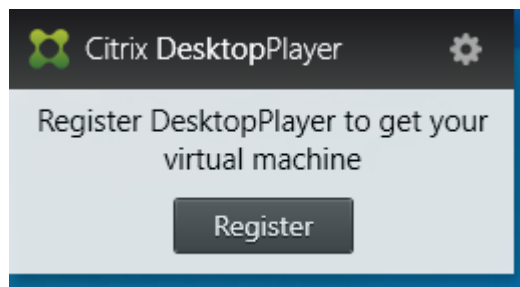
Once the installation begins, a screen appears illustrating the progress:



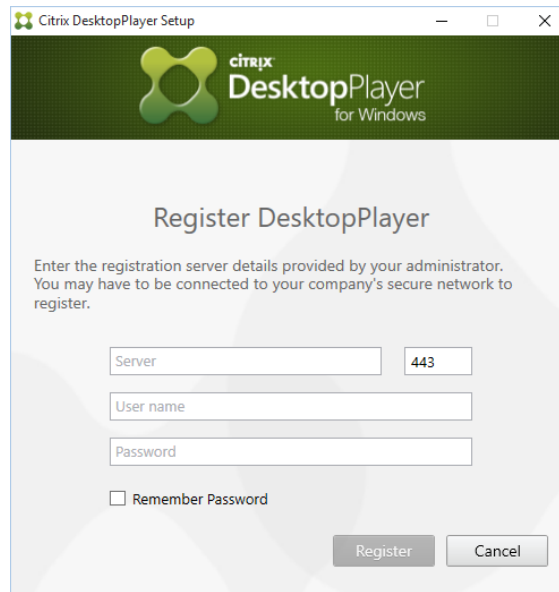
3. Once the installation finishes, click **Close** to complete it. In some cases, a restart of the host may be required. Click **Restart Now** (or restart later to finish installation):



4. After restarting, click on the DesktopPlayer icon in the system tray bar (bottom right side of Windows) to register with Synchronizer:



5. Register DesktopPlayer. Enter the Synchronizer FQDN and user credentials. For an AD user, enter your AD user name and password. For a local user, enter the user name and password created for Synchronizer (this was created by your administrator):



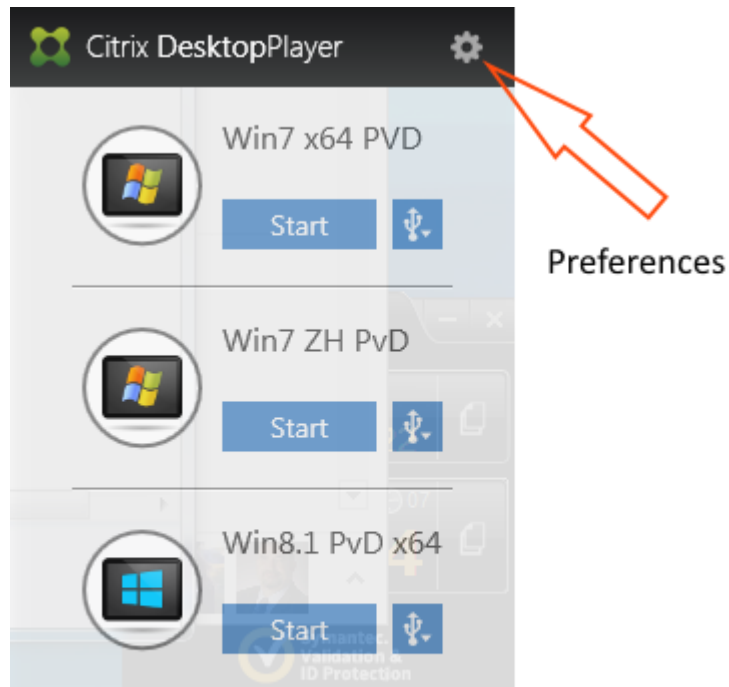
DesktopPlayer Preferences

Use the Preferences menu to access configuration options, system information, to submit feedback, or to view additional information about DesktopPlayer. To access preference, first find DesktopPlayer service icon at bottom of right hand side of Windows taskbar.



DesktopPlayer icon

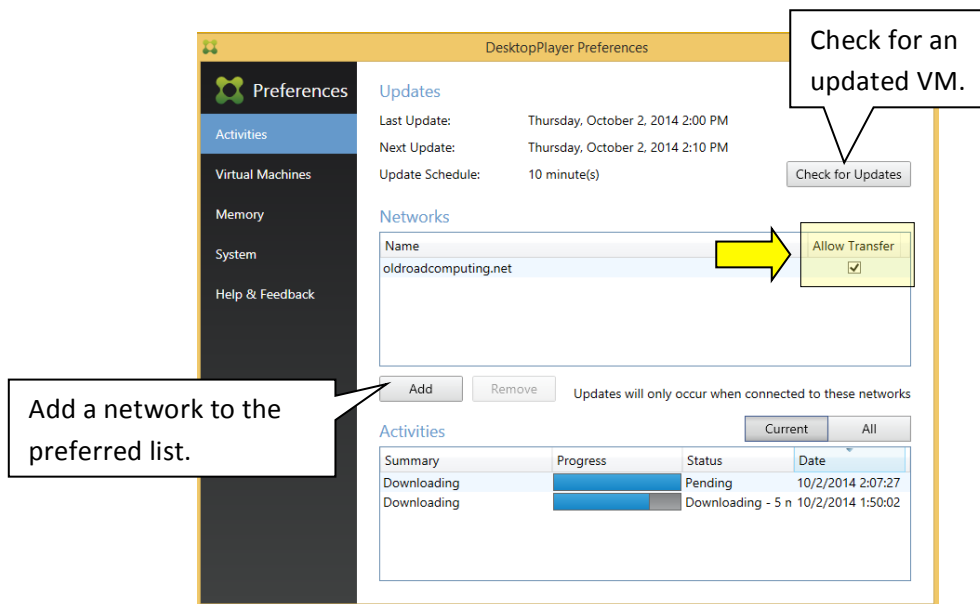
Single click to bring DesktopPlayer user interface and click on top right hand side configuration icon



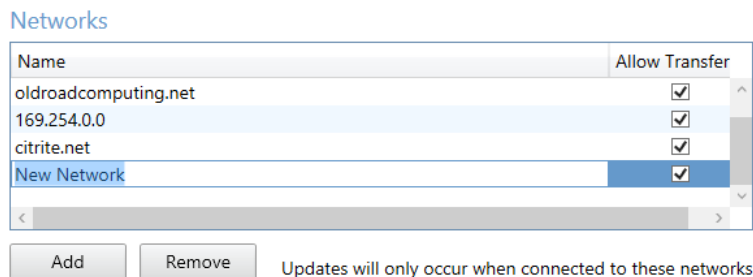
Options in the **Preferences** panel include:

- Activities – Displays information about recent updates, available networks, and current and pending activities. You can also use this panel to check for updates, or to specify a list of acceptable networks (networks that are permitted to transfer updates between Synchronizer and DesktopPlayer; select the **Allow Transfer** checkbox).

i VM images are typically large; Citrix recommends that you allow transfers on reliable networks capable of supporting the extraneous load on network resources when downloading VMs.

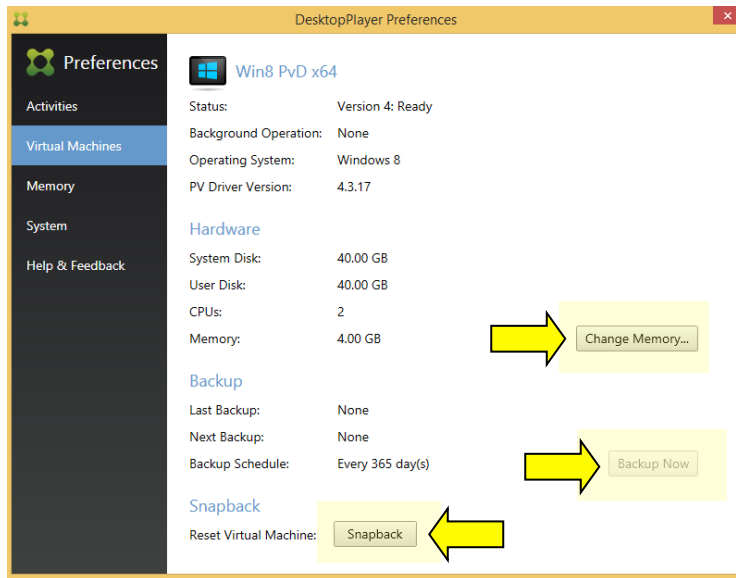


To add a network to the list, click **Add**; enter a name for the new network, and select the **Allow Transfer** checkbox:

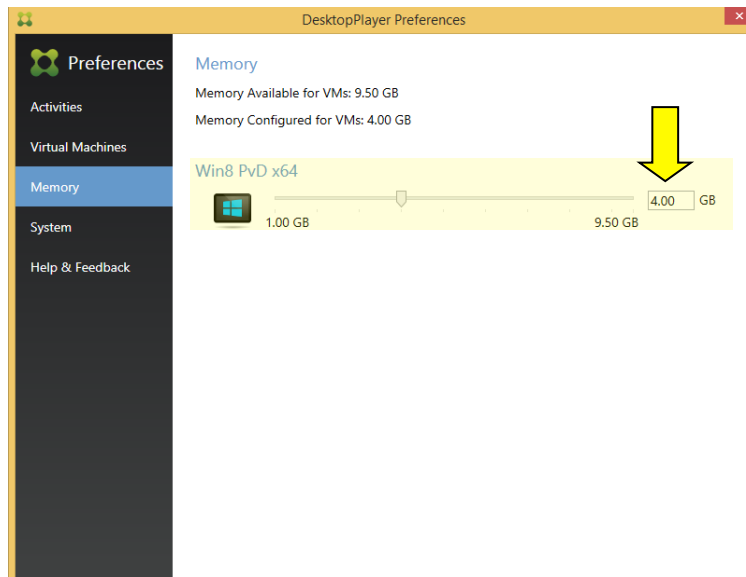


i Updates will only occur when DesktopPlayer is connected to a named network and the **Allow Transfer** checkbox is selected.

- Virtual Machines – Use this preference panel to display information about the assigned Windows VM. A number of options are provided to provide additional control, including changing the allocated memory, backing up the VM, or snapback to the previous configuration if policy allow user such action.



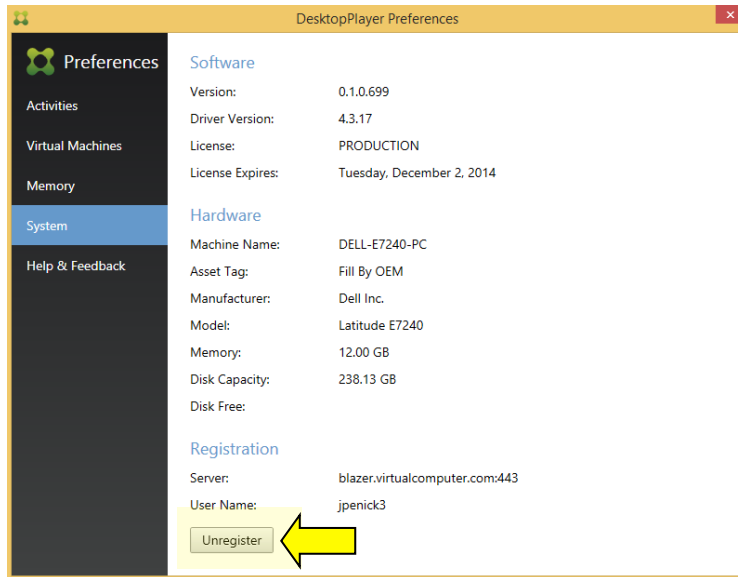
- Memory – Use this preference control panel to modify the memory used by the Windows VM. Available memory is displayed, along with the current memory configured for all assigned VMs. Move the slider to the desired amount of memory, or manually enter a value:



i You must restart the VM after changing the memory setting to apply the new memory configuration.

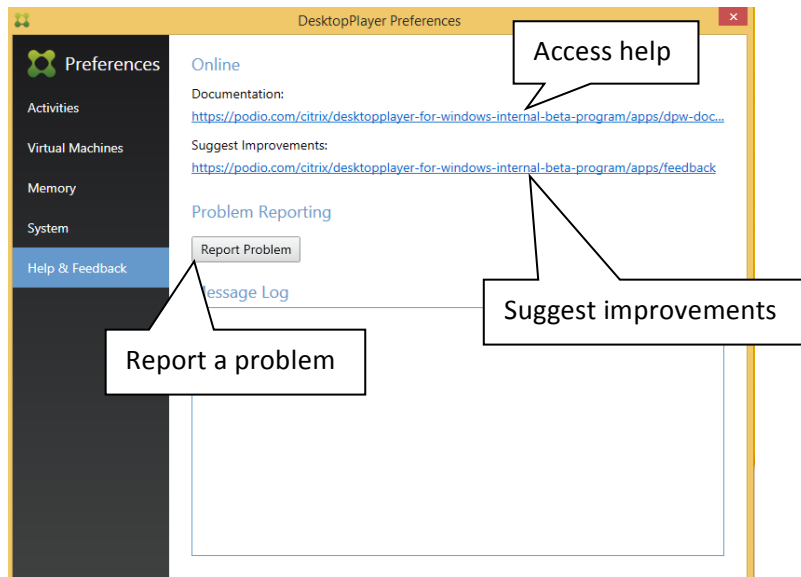
- System – The System preferences panel provides information about the DesktopPlayer version, including the current license and expiration date. Hardware information for the DesktopPlayer endpoint is also provided. If the computer running DesktopPlayer is

registered to Synchronizer, the server and user name are displayed. Click **Unregister** to disconnect from Synchronizer.



The DesktopPlayer endpoint must be registered to Synchronizer to receive updates, or to save changes to the VM.

- Help & Feedback – Use the Help & Feedback screen to report problems to Citrix Support, suggest improvements, or to access the Help system:



To report a problem with DesktopPlayer, click **Report Problem** and submit additional information to help Citrix resolve the issue:

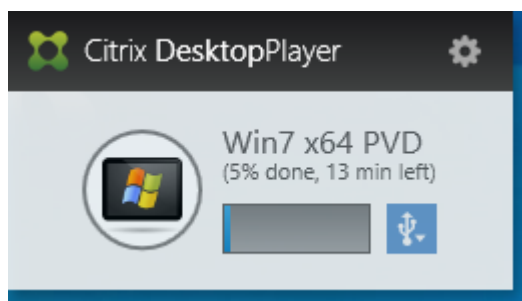
The screenshot shows a 'Report Problem' dialog box with the following fields and callouts:

- Subject:** A text input field with the placeholder 'enter a subject'. A callout box points to it with the text: 'Provide a short, descriptive subject that describes the problem.'
- Your E-mail:** A text input field with the placeholder 'your e-mail'. A callout box points to it with the text: 'Include an email address so Citrix Support can contact you, if necessary.'
- Description:** A large text area for describing the problem. A callout box points to it with the text: 'Provide a description of the problem, click **Submit**.'

At the bottom of the dialog are two buttons: 'Submit' and 'Cancel'.

Starting DesktopPlayer

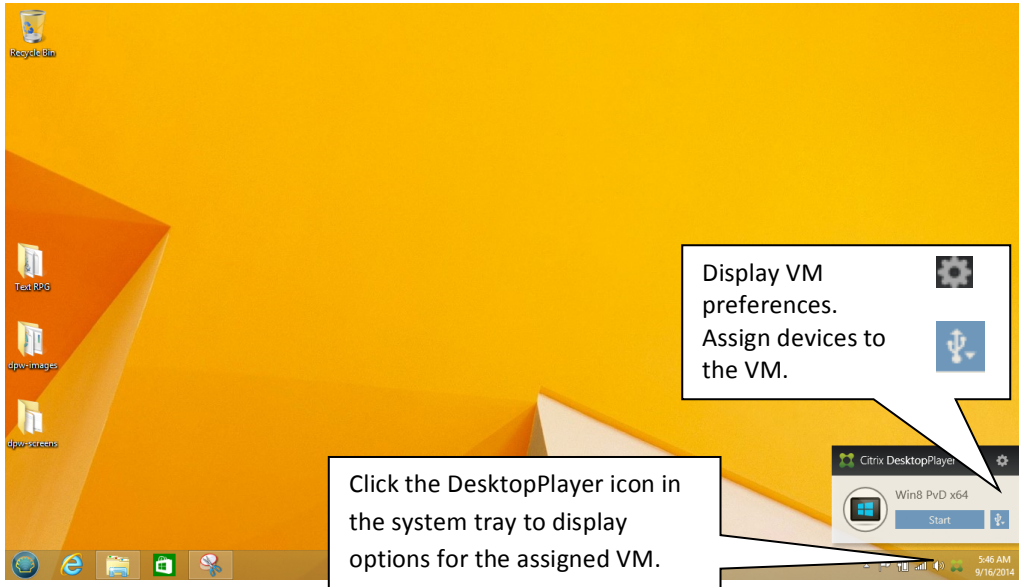
After registering your DesktopPlayer endpoint, DesktopPlayer may start to download VM(s) assigned to the user:



Once it finishes downloading, it will prepare the VM. And after preparation is done, VM can be started.

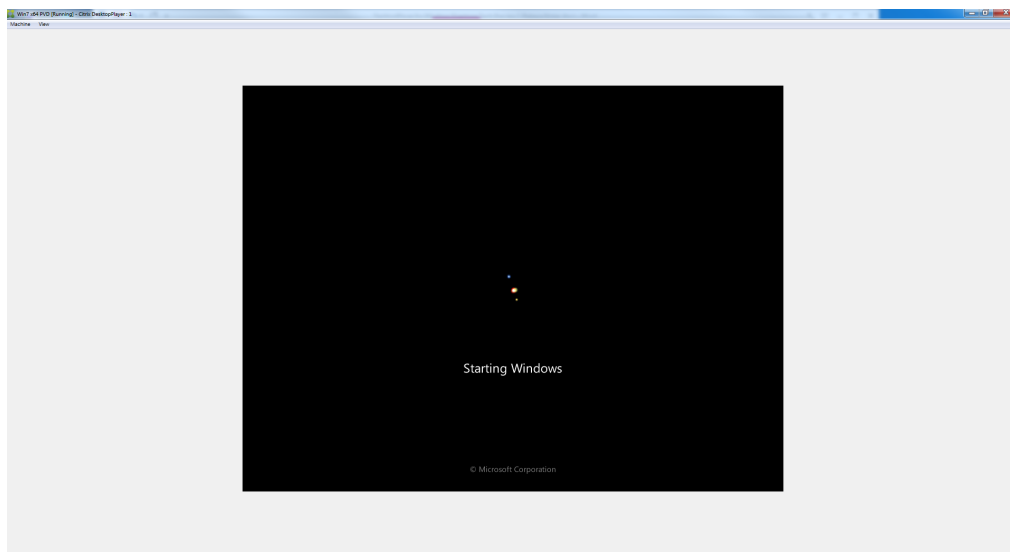


The DesktopPlayer icon is displayed in the system tray of the host computer. Use this icon to start, stop, configure aspects of the assigned VM, modify the list of assigned USB devices, or display VM preferences:

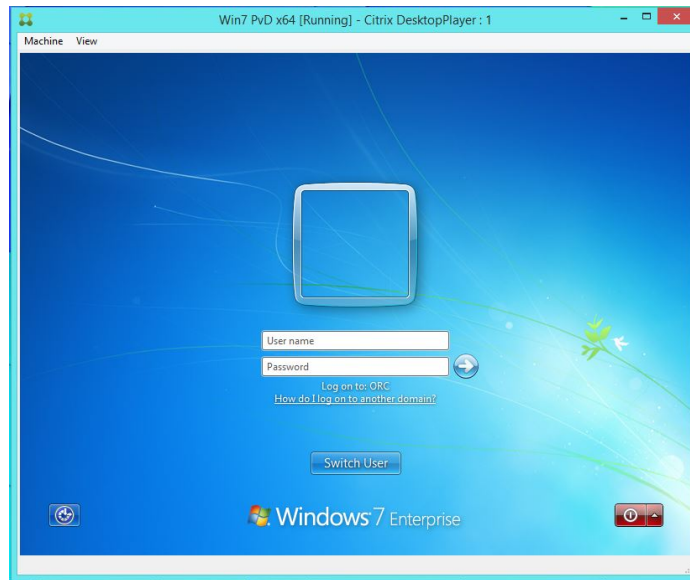


To start the assigned VM:

1. Click the DesktopPlayer icon in the system tray to display the pop-up menu.
2. Click **Start**; the assigned VM starts, the Windows VM launches and goes through the startup process:



After starting the VM, the Windows logon screen appears; use the login information provided by the IT administrator:

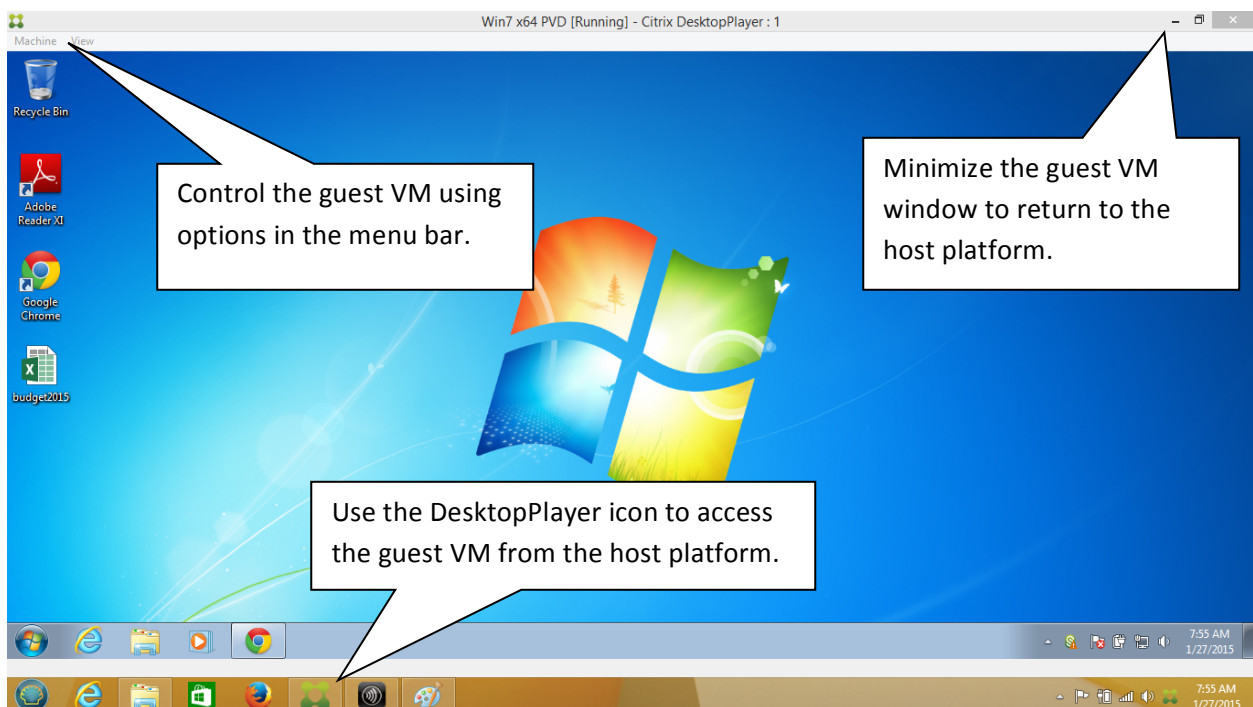


Using the Virtual Machine

This section provides information about using your VM for the first time. When using it, consider the following:

- The VM initially displays as a DesktopPlayer window inside of the host operating system.
- You can use the VM within a minimized window, or, you can display it in full screen mode.
- When first starting, the VM launches in windowed mode by default.

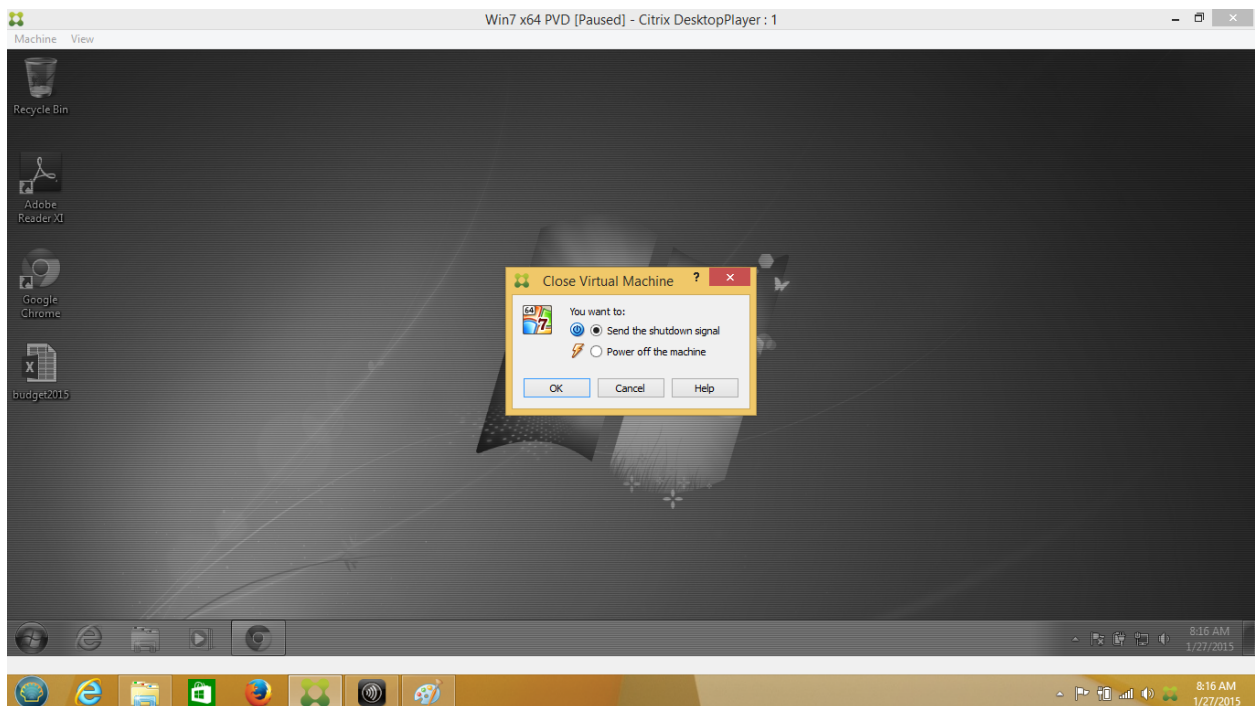
The image below illustrates a guest VM running on the host machine.



The guest VM has a limited set of controls you can use to stop the VM or control aspects of the window display. Use **Machine** controls to insert a Ctrl+Alt+Del command to the guest VM, or to close the window:



We recommend shutting down from inside the VM, but VM can also be shutdown by closing the guest VM, DesktopPlayer displays a screen that allows you to choose between sending a shutdown signal (which gracefully logs the user off), or powering-off the machine:



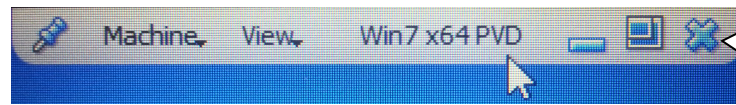
Use **View** options in the menu bar to control aspects of the host VM screen:



These options include:

- **Switch to Fullscreen.** When selecting this option, the guest VM screen overlays the host platform, effectively hiding it behind the guest. Once in full screen mode, move the

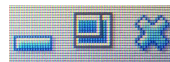
cursor to the top center of the guest VM display to access additional controls from a drop down menu:



Minimize the window, exit full screen, or close the guest VM.

These additional controls include:

- Machine. Insert a **Ctrl-Alt-Del** command to the guest VM, or click **Close**.
- View. Select **Switch to Fullscreen** to return the VM to an overlay where the guest VM window is on top of the host window, or click select **Auto-resize Guest Display** to adjust the size of the guest VM window automatically.
- Minimize, maximize, or close the guest VM window using the icons:



- **Auto-resize Guest Display.** Use this option to automatically resize the guest VM display to the confines of the current display size.
- **Adjust Window Size.** Use this option to manually adjust the size of the guest VM display. Once this option is selected, use the mouse to drag elements of the window to the desired size.



When switching to full-screen mode, DesktopPlayer automatically expands the VM screen to both internal and external monitors. If you want to use only one monitor, use the control panel inside the VM. Click **Display -> Screen Resolution** and select **Show desktop only on #**.

Synchronizing with ShareFile

DesktopPlayer provides a seamless vehicle to experience client virtualization. One such example is using ShareFile to synchronize your files. Whether you're on the phone, tablet, a hosted desktop, or using DesktopPlayer, you'll have full access to all of your company files.

After launching your Windows Guest VM, open Windows Explorer. If you have it configured properly, and possess a ShareFile account, Windows Explorer displays your home directory:

