You can find the most up-to-date technical documentation on the VMware website at: https://docs.vmware.com/

If you have comments about this documentation, submit your feedback to docfeedback@vmware.com
Security Information

You should exercise caution and good judgment about where you deploy View Planner. View Planner is not intended to be used in production environments.

Security Warning

The setup procedure for View Planner may open ports or present other security issues that are not acceptable in many secure environments. A View Planner deployment is intended only for a performance test environment and may not be hardened sufficiently for all security requirements. Do not install View Planner harness or agent on virtual machines or OS instances that have been or may ever be deployed in a production environment, or that contain sensitive or personal information.

This chapter includes the following topics:
- View Planner Port Requirements
- Photon OS Upgrade

View Planner Port Requirements

View Planner uses a specific list of ports. Ensure you adhere to the port requirements.

Port Requirements

<table>
<thead>
<tr>
<th>Port</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>SSH</td>
</tr>
<tr>
<td>68</td>
<td>DHCP</td>
</tr>
<tr>
<td>8080</td>
<td>View Planner agent to harness communication.</td>
</tr>
<tr>
<td>8081</td>
<td>View Planner web Interface.</td>
</tr>
<tr>
<td>3306</td>
<td>View Planner web interface over HTTP.</td>
</tr>
<tr>
<td>5480</td>
<td>VAMI service</td>
</tr>
</tbody>
</table>
Caution  Above table lists port required for a default view planner deployment. If you want to test your own application by plugging in a custom workload, you may need to open additional ports based on the application requirements.

Photon OS Upgrade

View Planner harness appliance is based on Photon OS 1.0. However, you can upgrade it to Photon OS 2.0.

To upgrade to Photon OS 2.0, see Upgrading to Photon OS 2.0.
Overview of VMware View Planner

VMware View Planner is a workload generator that simulates typical user operations such as typing in Microsoft Word, playing a PowerPoint slideshow, reading Outlook emails, browsing PDF and Web pages and watching video.

**Caution** View Planner should not be deployed in production environments. See section [Chapter 1 Security Information](#) for details.

View Planner consists of these components:

- Several desktop virtual machines running on one or more ESXi hosts.
- Several client virtual machines running on one or more ESXi hosts.
  
  **Note** Client virtual machines are used only in the case of remote-mode runs and not for local-mode runs.

- Single View Planner controller appliance running on an ESXi host.
This chapter includes the following topics:

- **VMware View Planner Operation**
- **VMware View Planner User Interface**
- **Understanding VMware View Planner Reports**

**VMware View Planner Operation**

You can operate VMware View Planner in either remote mode or local mode.

When you start a View Planner run, a controller running in the virtual appliance powers on the desired number of desktops and client (for remote-mode runs) virtual machines, manages the workload execution, and gathers the result.
Remote Mode

The Remote mode represents real-world VDI deployments. However, it requires more hardware than the local mode operation.

When you initiate a remote-mode run, the harness powers on the configured number of desktop virtual machines and the same number of client virtual machines. After the virtual machines boot, they report their readiness to the harness. The harness then arranges for each client virtual machine to control and monitor a desktop virtual machine. After the configured number of client-desktop virtual machine pairs are established, the run begins.

During the run, each client virtual machine acts like a user, taking its designated desktop virtual machine through a series of predefined operations while measuring that desktop virtual machine’s performance.

When the run is completed, both the desktop and client virtual machines report the results to the harness, where it is stored in a database for post-processing.

**Figure 2-2. VMware View Planner Operation (Remote Mode)**

Local Mode

Local mode does not use client virtual machines and, therefore, needs a lesser hardware to test the same number of virtual machines. This mode does not simulate the network and system load of VDI protocols and is not an accurate representation of real-world VDI deployments.
When you initiate a local-mode run, the harness powers on the configured number of desktop virtual machines. After the virtual machines boot, they report their readiness to the harness, which then starts the run.

During the run, the View Planner agent in the desktop virtual machine acts like a user, taking the virtual machine through a series of predefined operations while measuring its performance.

When the run is completed, the desktop virtual machines report their results to the harness, where they are stored in a database for post-processing.

**Figure 2-3. VMware View Planner Operation (Local Mode)**

![Diagram showing VMware View Planner operation](image)

**VMware View Planner User Interface**

You can interact with the View Planner using the web UI or the command-line Interface provided by the controller appliance.

Using the View Planner User Interface, you can:

- Define the Test-bed configuration.
- Provision the desktop and client virtual machines.
- Monitor progress of View Planner runs.
- View results and reports.

Command-line interface can also be used for automating View Planner operations.
Understanding VMware View Planner Reports

When a View Planner run completes, the View Planner controller appliance generates a run report containing a summary of the run results.

View Planner workload mix consists of multiple applications running in the desktop virtual machines and performing user operations. These user operations are separated into the three groups:

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>Interactive, CPU bound operations</td>
</tr>
<tr>
<td>Group B</td>
<td>IO bound operations</td>
</tr>
<tr>
<td>Group C</td>
<td>Long running and other miscellaneous operations</td>
</tr>
</tbody>
</table>

The operations in Groups A and B are used to determine Quality of Service, while the operations in Group C are used to generate additional load.

View Planner Quality of Service

Quality of Service (QoS), determined separately for Group A user operations and Group B user operations, is the 95th percentile latency of all the operations in a group. The default thresholds are 1.0 seconds for Group A and 6.0 seconds for Group B.

View Planner Application Response Time

View planner application response time table reports the time taken by each work load operation.

Application response time table reports following info about workload operations:

- Operation Name.
- Operation Group (Group A/B/C).
- Executed / Expected count of an operation.
- The Mean value of the operation latency as reported by all virtual machines under test.
- The Median value of the operation latency as reported by all virtual machines under test.
- Variance: Latency difference between slowest and fastest operation.
How to Run VMware View Planner

VMware View Planner can be configured to run in various test modes like Remote, Local, RDSH.

**Caution** View Planner should not be deployed in production environments. See section Chapter 1 Security Information for details.

This chapter includes the following topics:

- Perform a Local Mode Test
- Perform a Remote Mode Test
- Perform a Remote Mode RDSH Test
- Perform a Remote Mode RDSH Application Test

**Perform a Local Mode Test**

Local mode test is simpler to configure and needs less hardware to test the same number of desktops as client virtual machines are not needed.

**Procedure**

1. Deploy View Planner harness using the steps provided in Deploying the View Planner Harness. View Planner harness web UI should be accessible.
2. Configure Infra server and VDI server in View Planner Harness using the steps in Configuring the View Planner Harness.
3. Prepare the desktop Golden VM using steps provided in Setting Up the View Planner Desktop Virtual Machines.
4. You can use one of the two options below for creating desktop virtual machines for tests:
   - Create desktop pool using VMware Horizon View.
   - Create desktop virtual machines using steps provided in Creating Clones Using View Planner.

Use desktop Golden VM created in the previous step as the parent VM, select snapshot and Sysprep / QuickPrep profile created in previous step.
5 Create a local mode run profile using steps provided in Creating a Run Profile.

   Set the Run Mode to local and Desktop Prefix to the pool prefix if VMware Horizon View pool is used.

6 Start the run using steps provided in Starting a View Planner Run.

Perform a Remote Mode Test

This mode represents real-world VDI deployments. However, it requires more hardware than the local mode operation.

Procedure

1 Deploy View Planner harness using steps provided in Deploying the View Planner Harness.
   View Planner harness web UI should be accessible.

2 Configure Infra server, Identity Server, and VDI server in View Planner Harness using steps in Configuring the View Planner Harness.

3 Prepare the desktop Golden VM using steps provided in Setting Up the View Planner Desktop Virtual Machines.

4 Create desktop pool using VMware Horizon View.
   Use the desktop Golden VM created in the previous step as the parent VM and select the snapshot and Sysprep/QuickPrep profile created in the previous step.

5 Prepare the client Golden VM using steps provided in Setting Up the View Planner Client Virtual Machines.

6 Create equal number of client virtual machines using the steps provided in Creating Clones Using View Planner.
   Use the client Golden VM created in the previous step as the parent VM, select snapshot and Sysprep/QuickPrep profile created in the previous step.

7 Create a remote mode run profile using steps provided in Creating a Run Profile.
   Set the Run Mode to remote, Desktop Type to vdi, Desktop Prefix to the pool prefix, and Client Prefix to the client VM prefix.

8 Start the run using steps provided in Starting a View Planner Run.

Perform a Remote Mode RDSH Test

You can configure View Planner for Remote Desktop Session Host(RDSH).

Procedure

1 Deploy View Planner harness using steps provided in Deploying the View Planner Harness.
   View Planner web UI should be accessible.
2 Configure Infra server, Identity Server, and VDI server in View Planner Harness Using Steps in Configuring the View Planner Harness.

3 Prepare the RDSH server Golden VM using steps provided in Setting Up the View Planner Desktop Virtual Machines.

4 Create an RDSH Farm and RDSH desktop pool using VMware Horizon View.
   Use the RDSH Golden VM created in the previous step as the parent VM, select the snapshot and Sysprep/QuickPrep profile created in the previous step.

5 Prepare the client Golden VM using steps provided in Setting Up the View Planner Client Virtual Machines.

6 Create the required number of the client virtual machines using the steps provided in Creating Clones Using View Planner.
   Use the client Golden VM created in the previous step as the parent VM and select the snapshot and Sysprep/QuickPrep profile created in the previous step.

7 Create a remote mode run profile using steps provided in Creating a Run Profile.
   Set the Run Mode to remote, Desktop Type to rdsh_desk, Desktop Prefix to the RDSH farm prefix, and Client Prefix to the client VM prefix.

8 Start the run using steps provided in Starting a View Planner Run.

Perform a Remote Mode RDSH Application Test

You can configure View Planner for the Remote Desktop Session Host(RDSH) Application test.

Procedure

1 Deploy View Planner harness using steps provided in Deploying the View Planner Harness.
   View Planner harness web UI should be accessible.

2 Configure Infra server, Identity Server, and VDI server in View Planner Harness Using Steps in Configuring the View Planner Harness.

3 Prepare the RDSH server Golden VM using steps provided in Setting Up the View Planner Desktop Virtual Machines.

4 Create an RDSH farm and application pool using VMware Horizon View.
   While creating RDSH farm, use the RDSH Golden VM created in the previous step as the parent VM and select the snapshot and Sysprep/QuickPrep profile created in the previous step.
   Create a new manual RDSH application pool using RDSH farm. Enter the name and ID of the application pool as viewplanner and path of the application to C:\viewplanner\vp_default.bat.

5 Prepare the client Golden VM using steps provided in Setting Up the View Planner Client Virtual Machines.
6 Create the required number of the client virtual machines using the steps provided in Creating Clones Using View Planner.

Use the client Golden VM created in the previous step as the parent VM and select the snapshot and Sysprep/QuickPrep profile created in the previous step.

7 Create a remote mode run profile using steps provided in Creating a Run Profile.

Set the Run Mode to remote, Desktop Type to rdsh_apps, Desktop Prefix to the RDSH farm prefix, and Client Prefix to the client VM prefix.

8 Start the run using steps provided in Starting a View Planner Run.
How to Set Up VMware View Planner

VMware View Planner includes two components: View Planner harness and the View Planner agent.

Caution View Planner should not be deployed in production environments. See section Chapter 1 Security Information for details.

- The View Planner harness is released as an OVA file.
- The View Planner agent is released as an installer that must be installed in test virtual machines (desktop and clients).

This chapter includes the following topics:

- Deploying the View Planner Harness
- Configuring the View Planner Harness
- Setting Up the View Planner Desktop Virtual Machines
- Setting Up the View Planner Client Virtual Machines
- Setting Up the SSL Certificate in Microsoft Active Directory
- Creating Clones Using View Planner
- Creating a Run Profile
- Starting a View Planner Run

Deploying the View Planner Harness

You can deploy the View Planner harness using the OVA file.

Procedure


2. Start the OVA installation using vSphere Client.

3. Choose Static/DHCP IP when prompted and wait for the OVA initialization to complete.
4  Access the User Interface using the URL http://Your_Harness_IP:3307/vp-ui. Use default user name \texttt{vmware} and password \texttt{viewplanner}.

First OVA boot can take up to 20 minutes to complete, if the web UI login fails after 20 minutes, try a different browser or incognito mode.

\textbf{Figure 4-1. VMware View Planner Web User Interface}

![VMware View Planner Web User Interface](image)

5  You can also access View Planner harness command-line interface using SSH. Learn more about command tool at Chapter 5 View Planner Command Tool.

\textbf{Configuring the View Planner Harness}

Configuring the harness includes adding a vCenter Server, Active Directory, and the VDI server.

\textbf{Procedure}

1  To add an infra server, click the \texttt{SERVERS > Infra server > ADD NEW}. 
2 Enter your vCenter Server details and click **SAVE**.

**Figure 4-2. VMware View Planner Add Infra Server**

Add Infra Server

<table>
<thead>
<tr>
<th>Name</th>
<th>unique_vc_name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>vCenter</td>
</tr>
<tr>
<td>IP/URL</td>
<td>10.10.10.10</td>
</tr>
<tr>
<td>Datacenter</td>
<td>datacenter_or_cluster_with_test_VI</td>
</tr>
<tr>
<td>Domain</td>
<td>vsphere.local</td>
</tr>
<tr>
<td>User Name</td>
<td>administrator</td>
</tr>
<tr>
<td>Password</td>
<td>**********</td>
</tr>
</tbody>
</table>

3 To confirm that infra server is working properly, click the **test** option next to the server entry.

4 Setup SSL certificate and enable LDAP in Microsoft active directory using the steps provided in [Setting Up the SSL Certificate in Microsoft Active Directory](#).

   Identity Server (Active Directory) is optional for a local mode run.

5 To add Active Directory to View Planner, click **SERVERS > Identity Servers > ADD NEW**.
6 Enter your Active Directory details and click **Save**.

**Figure 4-3. VMware View Planner Add Identity Server**

**Add Identity Server**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain Name</td>
<td>ad.domain.com</td>
</tr>
<tr>
<td>Type</td>
<td>Microsoft Active Directory</td>
</tr>
<tr>
<td>IP/URL</td>
<td>10.10.10.10</td>
</tr>
<tr>
<td>Username</td>
<td>administrator</td>
</tr>
<tr>
<td>Password</td>
<td>***********</td>
</tr>
</tbody>
</table>

7 To confirm that identity server is working properly, click the **test** option next to your identity server.

8 To add aVDI server in View Planner, click **SERVERS > VDI Servers > ADD NEW**.

9 Enter your View server details and click **Save**.

**Figure 4-4. VMware View Planner Add VDI Server**

**Add VDI Server**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>unique_name</td>
</tr>
<tr>
<td>Type</td>
<td>View</td>
</tr>
<tr>
<td>IP/URL</td>
<td>10.10.10.10</td>
</tr>
<tr>
<td>Domain</td>
<td>view.domain.com</td>
</tr>
<tr>
<td>Username</td>
<td>administrator</td>
</tr>
<tr>
<td>Password</td>
<td>***********</td>
</tr>
</tbody>
</table>

10 To confirm that infra server is working properly, Click the **test** option next to your VDI server.
Setting Up the View Planner Desktop Virtual Machines

Setting up desktop virtual machine requires installing components such as VMware Horizon View Desktop agent, View Planner agent and test applications.

Procedure

1. Create a base Windows 10 / 7 VM.
2. Shut down the VM.
3. Open the .vmx file of the VM and add the `monitor_control.pseudo_perfctr = "1"` entry to the file.
   This entry provides access of the host timer, which is more accurate than the VM timer.
4. Install all required software for the test, such as Vmware Horizon View Agent, Microsoft Office, Adobe PDF reader, and Chrome.
5. Install View Planner agent on the VM using `viewplanner-agent-version.msi`.
6. Enter the harness IP when prompted.
   The view planner agent process should have access to read and write registry without windows UAC prompts. Disable windows UAC, if necessary.
7. If this is an RDSH server, set `RDSH_SERVER_MODE` to 1 and `AUTOLOGIN_USER_ACCOUNT` to windows user name that is configured for auto login in C:`\viewplanner\config\agent.config`
8. Shut down the VM and take a snapshot.
9. Create a desktop Sysprep / QuickPrep customization script using vCenter Server.
   This script is used while creating clones from golden desktop VM. The customization script should enable auto-login using an admin account. For remote mode test, configure customization script to join Microsoft active directory domain.

Setting Up the View Planner Client Virtual Machines

Setting up client virtual machine requires installing components such as VMware Horizon View Client and View Planner agent.

Procedure

1. Create a base Windows 10 / 7 VM.
2. Shut down the VM.
3. Open the .vmx file of the VM and add the `monitor_control.pseudo_perfctr = "1"` entry to the file.
   This entry provides access of the host timer, which is more accurate than the VM timer.
4. Install the VMware Horizon View Client.
5 Install View Planner agent on the VM using `viewplanner-agent-version.msi`.

6 Enter the harness IP when prompted.

   The view planner agent process should have access to read and write registry without windows UAC prompts. Disable windows UAC, if necessary.

7 Shut down the VM and take a snapshot.

8 Create a desktop Sysprep/QuickPrep customization script using vCenter Server.

   This script is used while creating clones from golden client VM. Customization script should enable auto-login using an admin account.

---

**Setting Up the SSL Certificate in Microsoft Active Directory**

VMware View Planner uses an SSL connection for interacting and managing users with Microsoft Active Directory.

**Prerequisites**

Microsoft Active Directory should be installed.

**Procedure**

- Use steps outlined in the Microsoft guide to set up and enable SSL in Microsoft Active Directory.

---

**Creating Clones Using View Planner**

You can clone virtual machines required for test using View Planner.

**Procedure**

1 In View Planner Web UI, navigate to **VMs** tab.
2. Enter required details for the clones to be created.

Figure 4-5. VMware View Planner Clone Virtual Machines

3. Click **CLONE** and wait for virtual machines to be created.

   This step might take some time based on the number and type of clones to be created. Provide sufficient time for initialize of virtual machines before starting the test.

Creating a Run Profile

Run Profile defines the parameters of a run.

**Procedure**

1. In View Planner Web UI, navigate to the **RUN PROFILE** tab and click **ADD NEW**.
2 Enter required details and click **NEXT**.

**Figure 4-6. VMware View Planner Create Run Profile**

Set iteration count to 5. Mandatory fields are marked as ***. Other fields can be left blank.

**Add Run Profile** wizard moves to the **Work Group** tab.

3 Provide a **Work Group** name.

View Planner creates Active Directory users using **Work Group** Name as prefix in case of remote run.

4 Select an identity server added previously as **Domain Name**.

Applicable for remote mode test.

5 Select a work profile.

For a standard test, use **standardTestProfile_chrome** or **standardTestProfile_edge**. Other Work Profiles can be used for testing individual application.
6 Select a **Display Protocol**.

Applicable for remote mode test.

**Figure 4-7. VMware View Planner Create a Work Group**

7 Select a **Desktop Type**.

- For normal Remote runs with the VDI server, select `vdi`.
- For VMware Horizon View direct connect runs, select `direct_connect`.
- For RDSH server runs, select `rdsh_desk`.
- For RDSH application server runs, select `rdsh_apps`.

8 Enter the desktop virtual machine details.

   a Provide a desktop prefix.

      Provide pool prefix if VMware Horizon View pool is being used else provide prefix of desktop clones.

   b Select an Infra server configured previously.
c Select a VDI server.
   Optional in for local mode run and not required for direct connect run.

d Press save (✓) button.

9 Fill Client virtual machine details.
   a Provide prefix for client virtual machines.
   b Select an Infra server that manages clients.
   c Press save (✓) button.

10 Click NEXT and review the details.

Figure 4-8. VMware View Planner Review Run Profile

11 Click FINISH.

Starting a View Planner Run

You can start a run using Run Profile as a template.

Procedure
1 In View Planner Web UI, navigate to the RUN tab and click button NEW RUN.
   You see a New Run wizard.
2 Select a Run Profile created previously and provide a unique name for run.

**Figure 4-9. VMware View Planner Start Run**

New Run

- Run Profile
- Run Name
- Description

3 Click **START RUN** button.

4 Use the **Run** option in **RUN** tab to track status of run. A run can take long time to complete based on Work Profile and virtual machine count.

5 Navigate to **RUN > Instance List** to get the report of the run after completion.
View Planner Command Tool

You can use the View Planner command tool to configure and run View Planner instead of the web UI. The command tool can also be used for automation.

This chapter includes the following topics:

- Accessing Command Tool
- View Planner Commands

Accessing Command Tool

You can access the View Planner command-line tool by Connecting to harness using SSH.

Procedure

1. Access the harness command line using SSH. Use user name root and viewplanner as the default password.

2. Use the vpcmd -u user -p password command to access the View Planner command tool. Use user name vmware and password viewplanner.

View Planner Commands

You can use the help command to get a list of available commands and helpcommand_name to get the command details.

- Command to add an infra server:
  infraServer -a unique_name -t vcenter -i IP --datacenter datacenter_name -d domain -u user_name

- Command to add an identity server:
  identityServer -a domain_name -t microsoft_ad -i IP -u user_name

- Command to add a VDI server:
  vdiServer -a unique_name -t view -i IP -d vdi_user_domain -u user_name

- Command to add custom workloads:
  workload -a name -v version
Command to add workProfile:
workProfile --add name --description description --addWorkloads
workload_names_separated_by_comma

Commands to Add runProfile:
runProfile -a name --runMode <local/remote> --VMcount VM_count --iterCount
iteration_count --description run_profile_description

workGroup -a name --runProfile run_profile_name --domain identity_server_name --
workProfile work_profile_name --percent 100 --displayProtocol <pcoip/blast/rdp> --
deskType <vdi/direct_connect/rdsh_desk/rdsh_apps>

workGroup --addDesk work_group_name --runProfile run_profile_name --prefix
desktop_pool_prefix --infraServer infra_server_name --vdiServer vdi_server_name

Commands to start and track run:
run --start run_profile_name --instance unique_run_instance_name
run --status

Command to generate the report:
report --generate --instance run_instance_name --format <pdf/txt> --mode
<local/remote> --begin first_iteration_number_starting_from_1 --end
last_iteration_number
You can access advanced configuration options by navigating to **SETTINGS > Configuration** page.

<table>
<thead>
<tr>
<th>Configuration Option</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>agent_scheduler_think_time_sec</td>
<td>Integer (default 5)</td>
<td>Time agent scheduler takes between scheduling of workload operations in seconds. Increasing this reduces overall CPU load and increases run time.</td>
</tr>
<tr>
<td>default_test_user_password</td>
<td>Q1w2e3r4!</td>
<td>Password used by View Planner for creating Test Active Directory users</td>
</tr>
<tr>
<td>minimum_vm_required_percent</td>
<td>80</td>
<td>View Planner proceeds with run when at least this % of VMs are initialized without error.</td>
</tr>
<tr>
<td>rampup_time_base_sec</td>
<td>60</td>
<td>View Planner agent uses this number as base for calculating default ramp-up time. Increasing this reduces CPU load and increases run time.</td>
</tr>
<tr>
<td>rampup_time_increment_per_vm_sec</td>
<td>2</td>
<td>View Planner agent uses this number for calculating default ramp-up time. Increasing this reduces CPU load and increases run time.</td>
</tr>
<tr>
<td>rampup_time_max_sec</td>
<td>600</td>
<td>View Planner agent uses this number for calculating maximum default ramp-up time. Increasing this reduces CPU load and increases run time.</td>
</tr>
<tr>
<td>rampup_time_mgmt_run_sec</td>
<td>10</td>
<td>View Planner uses this ramp-up time for pre-run and preparation workloads.</td>
</tr>
<tr>
<td>rdsh_apps_pool_name</td>
<td>viewplanner</td>
<td>View Planner expects vp_default.bat to be exported as this application name in case of RDSH application test.</td>
</tr>
<tr>
<td>skip_vm_health_check</td>
<td>0/1</td>
<td>Set this value to 1 to skip VM health check during the run.</td>
</tr>
<tr>
<td>status_with_timestamp</td>
<td>0/1</td>
<td>Set this value to 1 to see run status with time stamp in web UI.</td>
</tr>
<tr>
<td>unmanaged_server_user_prefix</td>
<td>vptest</td>
<td>View Planner uses this value as user prefix when an unmanaged Identity server is used.</td>
</tr>
<tr>
<td>vm_force_reboot</td>
<td>0/1</td>
<td>Set this value to 0 to disable force reboot of VM during run.</td>
</tr>
<tr>
<td>vm_reboot_rate_per_minute</td>
<td>40</td>
<td>Maximum VM reboot requested per minute, Lower value means less load on host.</td>
</tr>
<tr>
<td>vm_login_rate_per_minute</td>
<td>0</td>
<td>Set this value to limit remote login requests per minute during run. Default 0 means as fast as possible.</td>
</tr>
<tr>
<td>wait_time_after_vm_boot_sec</td>
<td>0</td>
<td>Set this value to provide some time to settle virtual machines after reboot.</td>
</tr>
</tbody>
</table>
You can refer this section for software support.

**Software Support:**

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Microsoft Windows 7, Microsoft Windows 10 (32 bit and 64 bit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMware Horizon View</td>
<td>7–7.7</td>
</tr>
<tr>
<td>vSphere</td>
<td>6–6.7</td>
</tr>
</tbody>
</table>

**Workload Application Support:**

<table>
<thead>
<tr>
<th>Application</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Word</td>
<td>2013, 2016</td>
</tr>
<tr>
<td>Microsoft Power Point</td>
<td>2013, 2016</td>
</tr>
<tr>
<td>Microsoft Excel</td>
<td>2013, 2016</td>
</tr>
<tr>
<td>Microsoft Outlook</td>
<td>2013</td>
</tr>
<tr>
<td>Adobe Acrobat Reader DC</td>
<td>15–19.010.20064</td>
</tr>
<tr>
<td>Google Chrome</td>
<td>66–72</td>
</tr>
<tr>
<td>Microsoft Edge</td>
<td>12.10240–17.17134</td>
</tr>
</tbody>
</table>