Using Flexera Software for Application and Endpoint Monitoring in a VMware® Horizon Mirage™ Implementation
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Introduction

VMware® Horizon Mirage™ provides a broad feature set that allows IT administrators to migrate endpoints from Windows XP to Windows 7, customize desktop configurations, create application layers to be distributed to different sets of endpoints, and back up and recover endpoints. Horizon Mirage integrates with third-party endpoint monitoring solutions such as Flexera AdminStudio Virtual Desktop Assessment. This white paper provides guidance for setting up endpoint and application monitoring with Flexera Software in a Horizon Mirage deployment.

VMware Horizon Mirage: Capabilities Overview

VMware Horizon Mirage is a layered image management solution that separates the PC into logical layers that are owned and managed by either the IT organization or the end user. IT administrators can update IT-managed layers while maintaining end-user files and personalization.

With the centralized management provided by Horizon Mirage, IT can perform all of the snapshot, migration, and recovery tasks remotely. This significant reduction in manual migration processes accelerates the migration project and decreases IT costs. Horizon Mirage is optimized for performance across the WAN, making it easy to support remote and branch office employees without added infrastructure or costs.

Horizon Mirage is designed to support up to 1,500 end users per Horizon Mirage server, and can easily scale up to 20,000 end users per server cluster.

For more information on migrating desktops from Windows XP to Windows 7 and setting up the Horizon Mirage deployment for backups and disaster recovery, see the VMware Horizon Mirage Reviewer’s Guide.
Application Assessment and Endpoint Monitoring via Third-Party Solutions

While Horizon Mirage provides a solution for IT to more easily manage and provision Windows desktops, IT administrators can also benefit from application assessment and endpoint monitoring solutions that make it possible to see how applications are used, how applications perform, and how endpoints behave in an environment. These capabilities are provided by Flexera Software, a VMware partner. This section describes the Flexera solutions.

**Flexera AdminStudio Virtual Desktop Assessment Solution**

The Flexera AdminStudio Virtual Desktop Assessment solution can deliver a sophisticated report on how applications behave in a whole system. The application, which includes the Virtual Desktop Assessment Manager component, collects statistics from Flexera Profile Collector agents installed on endpoints and provides a user interface for IT administrators to review the statistics.

IT administrators can set up a threshold value to alert them if an application performs poorly or the user experience is degraded on an endpoint.

*Figure 1: Virtual Desktop Assessment Interface Shows Applications Installed on Endpoints*
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Figure 2: Application-Specific Assessment Report

Figure 3: Define Machine Resource Thresholds to Detect Excessive Usage on Endpoints
Deployment Architecture with Flexera Virtual Desktop Assessment Manager

The Horizon Mirage architecture shown below includes the additional Flexera Virtual Desktop Assessment Manager component. IT deploys this component as a virtual appliance in the internal network. IT administrators also set up a firewall and load balancers to route incoming connections from TCP and UDP port 5501 into the Assessment Manager.

Flexera Profile Collector is the agent that resides on every endpoint. It sends data to the Virtual Desktop Assessment Manager.

Figure 4: Deployment Architecture with Flexera Virtual Desktop Assessment Manager and Profile Collector
Deploying Flexera Profile Collector Agent with Horizon Mirage

Flexera Profile Collector is a lightweight agent that runs on desktop and laptop computers to monitor endpoint behavior and capture data about users, applications, and computers. The agent collects data on usage, application consumption of memory, network traffic, and so on. This agent runs completely in the background, using minimal resources. Because it has a near-zero footprint, it runs unnoticed by the users being monitored.

You need to install the Flexera Profile Collector agent on the reference machine base layer, and then generate the base layer to all endpoints in the Horizon Mirage environment. The following steps will deploy the Flexera Profile Collector agent on Horizon Mirage endpoints:

1. Install the Flexera Profile Collector agent on your Windows 7 reference machine.
2. Inside the reference machine, go to %PROGRAM FILES%\Flexera Software\Profile Collector and run idcontrol.exe clean.
   **Note:** You must have elevated privileges to run this command.
3. Delete any files under %PROGRAM FILES%\Flexera Software\Profile Collector\ca. There should be no files remaining, including subfolders.
4. Delete the %PROGRAM FILES%\Flexera Software\Profile Collector\*.txt file.
5. Go to the Horizon Mirage Management Console, select Reference CVDs and capture the base layer of the reference machine that contains the Flexera Profile Collector agent. Update the base layer of the existing reference CVD.
6. Use the Horizon Mirage wizard to assign this new base layer to existing endpoints.

Assigning the new base layer to your endpoints deploys the Flexera Profile Collector agent to each client machine. Each agent will automatically register itself to the Virtual Desktop Assessment Manager, and then the whole system will be ready to gather data and generate statistics and reports in Flexera AdminStudio Virtual Desktop Assessment.

You can also consult the Flexera AdminStudio Virtual Desktop Assessment documentation for more information on how to configure your monitoring threshold and to learn about additional features.

With the Horizon Mirage desktop management features and Flexera monitoring and assessment of applications and endpoints, IT gains full control of an end-to-end solution that covers provisioning, disaster recovery, migration, and system monitoring. This helps the enterprise acquire more insight into the deployment and better statistics for planning. It also decreases downtime of endpoints and increases ROI.
About the Author

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References

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