

Command Line Tool for View Manager

View Manager 3.0

The Command Line Tool for View Manger is a utility provided with the View Manager application that allows you to carry out administrative and analytical activities that are not available from within the administrative interface.

The following sections describe the commands that are currently supported by the utility:

- "Assign Default Desktop" on page 1
- "List User Information" on page 2
- "List Orphan Desktops" on page 3
- "Remove View Manager Entry" on page 7

Command Line Tool Usage

The tool must be run locally on the View Manager server; the path to the executable file is:

C:\Program Files\VMware\VMware View\Server\bin\vdmadmin.exe

Command Line Tool instructions are issued from a Windows command prompt in the following form:

vdmadmin <command> <parameter(s)>

For example:

vdmadmin -D -d amethyst -u example\fsmith

NOTE You can view the command syntax and parameters supported by the tool by entering vdmadmin at the command prompt without any additional arguments.

Assign Default Desktop

Use this command to allocate or remove a default desktop or desktop pool to a user. This information can be used by thin client devices to determine which desktop or desktop pool the specified user should be connected to by default.

This command and associated parameters are described in Table 1 and Table 2.

Table 1. Assign a Default Desktop - Commands

| Command | Description | Example |
|---------|---|--|
| –D | Assign a default desktop or desktop pool to—or remove one from—a specified user. | To assign a default desktop to a user: –D –d <desktop_name> –u <user_name></user_name></desktop_name> |
| | | To remove the default desktop assigned to a user. |
| | | –D –r –u <user_name></user_name> |



| Tahlo 2 | Assian a | Default Deskto | n - Parameters |
|----------|----------|----------------|----------------|
| rable z. | Assign a | Delault Desklo | p - Parameters |

| Parameter | Description |
|----------------------------------|--|
| -d <desktop_name></desktop_name> | The name of the desktop. |
| -r | Remove the default desktop assigned to a user. |
| -u <user_name></user_name> | Name of the user in the form domain\username. |

List User Information

Use this command to examine Active Directory information associated with a specified user.

This command and associated parameters are described in Table 3 and Table 4.

Table 3. List user Information - Commands

| Command | Description | Example |
|---------|---|--------------------------------------|
| _U | Display information about a user including: Desktops to which they are entitled Account-level data, such as group membership and so forth | –U –u <user_name> [-xml]</user_name> |

Table 4. Assign a Default Desktop - Parameters

| Parameter | Description |
|----------------------------|---|
| -u <user_name></user_name> | Name of the user in the form domain\username. |
| -xml | Produce output in XML. |

User Information Report Examples

The data returned from this command can be presented in either plain text or XML. The following examples illustrate the content and format of this information.

Example User Information (Text)

The User Details provides basic information about the account properties associated with a user.

```
User Details

=-----

CommonName: Fred Smith

Surname: Smith

GivenName: Fred

Domain: EXAMPLE

SAMAccountName: fsmith

Account Properties: [NORMAL USER ACCOUNT]
```

The Group Membership section lists all Active Directory groups to which this user is a member that could be used for desktop entitlement.

Group Membership

EXAMPLE\Domain Users BUILTIN\Users

The VDM Entitlements section lists the desktop id and display name and description of any desktop to which this user is presently entitled, and also if any of these desktops have been disabled from within View Administrator interface:



VDM Entitlements

ruby | ruby | [Additional information, if any, is provided here] quartz | quartz |

Example User Information (XML)

```
<?xml version='1.0' encoding='utf-8'?>
<user-entrv>
  <user>
    <cn>Fred Smith</cn>
    <sn>Smith</sn>
    <given-name>Fred</given-name>
    <domain>EXAMPLE</domain>
    <domain-full>example.com</domain-full>
    <account-name>fsmith</account-name>
    <account_properties>
      <normal-user-account/>
    </account-properties>
    <sid>S-1-5-21-1184173328-2166697079-800706318-1107</sid>
  </user>
  <group_membership>
    <name>FOOBLEX\Domain Users</name>
    <name>BUILTIN\Users</name>
  </group-membership>
  <vdm_entitlement_list>
    <vdm-entitlement>
      <cn>ruby</cn>
      <display-name>ruby</display-name>
     <description/>
      <status>disabled</status>
    </vdm-entitlement>
    <vdm-entitlement>
      <cn>quartz</cn>
      <display-name>quartz</display-name>
      <description/>
      <status>enabled</status>
    </vdm-entitlement>
  </vdm-entitlement-list>
</user-entry>
```

List Orphan Desktops

After a persistent desktop or physical system is assigned, the user entitlement criteria for the desktop or desktop pool can be modified by the View Manager administrator. Conversely, revoking the entitlement for a user assigned a persistent desktop or physical system does not revoke the associated desktop assignment.

In some cases, such as where a user has been temporarily suspended or is on a sabbatical, this is the desired behavior: when entitlement is re-conferred, the user will be able to continue using the same desktop as before

In other cases, such as where a user has left the organization, this behavior is less desirable as the desktop can no longer be accessed by any other employee and is now considered to be orphaned.

The List Orphan Desktops command offers administrators the ability to examine the assignment information for View Manager desktops where the user entitlement does not correlate with current assignation. This information is displayed in a report—either in plain-text or XML—and the resulting data can be grouped either by desktop or by user. The report includes:

Desktops assigned to an unentitled user



- Policy overrides for desktops that reference an unentitled user
- Offline VDI desktops that have been checked out by an unentitled user

You can use this information to assist you in ensuring that no desktop continues to remain allocated to a user after their entitlement to that desktop has been permanently removed.

Desktop assignment can be removed within the administrative interface by selecting the appropriate entry from list displayed under the **Desktop Sources** tab and clicking **Remove**.

To remove Offline VDI desktops that are currently checked out to an unentitled user, you must additionally click the **Offline Sessions** tab, select the appropriate entry from list displayed under the **Desktop Sources** tab and clicking **Discard**.

The commands and associated parameters are described in Table 5 and Table 6.

| Command | Description | Usage | | | |
|---------|--|---|--|--|--|
| -0 | Show assigned desktops that are unentitled. | -0 [-ld -lu] [-xml [-noxslt -xsltpath <path>]]</path> | | | |
| -P | Show user policies associated with desktops that are unentitled. | -P [-ld -lu] [-xml [-noxslt -xsltpath <path>]]</path> | | | |

Table 5. List Orphan Desktop - Commands

| Parameter | Description | | |
|-------------------------|--|--|--|
| -1d | List unentitled desktops or policies, grouped by desktop. | | |
| -lu | List unentitled desktops or policies, grouped by user. | | |
| -noxslt | Suppress the default XSLT stylesheet reference in the XML output. | | |
| | For XML reports containing user policies applied to unentitled desktops (-P), the default reference is: | | |
| | xml-stylesheet type="text/xsl" href="c:\Program Files\VMware\VMware<br View\server\etc\unentitled-policies.xsl"?> | | |
| | For XML reports containing assigned desktops that are unentitled (-0), the default reference is: | | |
| | xml-stylesheet type="text/xsl" href="c:\Program Files\VMware\VMware<br View\server\etc\unentitled-machines.xsl.xsl"?> | | |
| -xml | Produce output in XML. | | |
| -xsltpath <path></path> | Override the default XSLT stylesheet reference in the XML output in order to use one in the location specified by <pre>path>.</pre> | | |

Table 6. List Orphan Desktop - Parameters

Command Line Report Examples

The data returned from this command can be presented in either plain text or XML. The following examples describe the content and format of this information.

Unentitled Desktops Grouped by User (Text)

| User Details | |
|---------------------|---|
| | |
| CommonName: | [common name of user] |
| Surname: | [surname of user] |
| Given Name: | [given name of user] |
| Domain: | [domain in which user account is defined] |
| SAMAccountName: | [account name] |
| Account Properties: | [general properties of account] |
| Machine | |
| ====== | |
| Display Name: | [display name for desktop in VirtualCenter] |
| Id: | [id for desktop in VirtualCenter] |
| Dn: | [dn for desktop in VirtualCenter] |
| MOID: | [MOID for VirtualCenter instance that manages the desktop] |
| VMPath: | [Path to the desktop in VirtualCenter] |
| VirtualCenter URL: | [address for accessing VirtualCenter] |
| Entitlement: | [Message indicating the (un)entitlement status. Can be either: |
| | - "The assigned user is no longer entitled to this machine" |
| | - "The user who has this VM checked out is no longer entitled"] |

Unentitled Desktops Grouped by User (XML)

```
<?xml version='1.0' encoding='utf-8'?>
<unentitled-vm-report>
 <byuser-list>
   <user-entry>
     <user>
        <cn>[common name of user]</cn>
        <sn>[surname of user]</sn>
        <givenName>[given name of user]</givenName>
        <domain>[domain in which user account is defined] </domain>
        <mail>[email address (if available)]</mail>
       <account-properties>
          <normal-user-account/>
          <!-- AND/OR -->
          <account-disabled/>
          <!-- AND/OR -->
          <smartcard-required/>
          <!-- AND/OR -->
          <account-locked-out/>
          <!-- AND/OR -->
          <password-expired/>
        </account-properties>
     </user>
      <desktop-list>
        <desktop-entry>
          <desktop>
            <displayname>[optional (user-defined) display name for desktop in VDM]</displayname>
            <id>[id of desktop in ADAM]</id>
            <dn>[dn of desktop in ADAM]</dn>
          </desktop>
          <vm-list>
            <vm>
              <displayname>[display name of desktop source]</displayname>
             <unentitled-type>
                <checked-out-by-user/>
                <!-- AND/OR -->
                <assigned-to-user/>
              </unentitled-type>
             <id>[id of desktop in VirtualCenter]</id>
              <dn>[dn of desktop in VirtualCenter]</dn>
              <moid>[MOID of VirtualCenter that manages the VM]</moid>
              <vmpath>[Path of desktop in VirtualCenter]</vmpath>
              <vcdn>[dn of VirtualCenter in ADAM]</vcdn>
              <vcurl>[address for accessing VirtualCenter]</vcurl>
            </vm>
```

```
</vm-list>
</desktop-entry>
</desktop-list>
</user-entry>
</byuser-list>
</unentitled-vm-report>
```

Transforming the XML Output

The XML output generated by the List Orphan Desktops commands can be transformed using an XSLT stylesheet. A number of sample stylesheets are provided with the Command Line Tool for View Manager, and are located in the following directory:

C:\Program Files\VMware\VMware View\Server\Extras\XsltFiles

The following stylesheets that accompany this utility convert XML to HTML in order to present the data as a series of bulleted lists:

- unentitled-machines.xsl-transforms reports that contain a list of unentitled desktops, grouped either by user or system, that are currently assigned to a user
- unentitled-policies.xsl-transforms reports that contain a list of desktops with user-level polices applied to unentitled users
- list-checkedout-unentitled.xsl-transforms reports that contain a list of desktops that are checked out by unentitled users

The -xsltpath <path> parameter can be used to modify the default XSLT stylesheet reference included in the XML output.

For example, the following simple XSLT 2.0 data transforms a list of unentitled desktops that are grouped by user into a basic table:

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="2.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
 <xsl:output method="html" indent="yes" encoding="utf-8"</pre>
  doctype-public="-//W3C//DTD XHTML 1.1//EN"
  doctype-system="http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd"/>
 <xsl:strip-space elements="*"/>
 <xsl:template match="byuser-list">
   <html xmlns="http://www.w3.org/1999/xhtml">
     <head>
       <title>
         <xsl:value-of select="local-name()"/>
       </title>
     </head>
     <bodv>
       <xsl:for-each select="user-entry">
           <xsl:apply-templates select="user | desktop-list/desktop-entry[1]"/>
           <xsl:for-each select="desktop-list/desktop-entry[position() != 1]">
             <xsl:apply-templates/>
             </xsl:for-each>
         </xsl:for-each>
       </body>
   </html>
 </xsl:template>
 <xsl:template match="desktop"/>
 <xsl:template match="*[parent::machine | parent::user]">
   <xsl:element name="td">
     <xsl:if test="parent::user">
       <xsl:attribute name="rowspan" select="count(../../desktop-list/desktop-entry)"/>
     </xsl:if>
```

```
<xsl:apply-templates/>
</xsl:element>
</xsl:template>
<xsl:template match="*[parent::account-properties | parent::unentitled-type]">
<xsl:template match="*[parent::account-properties | parent::unentitled-type]">
<xsl:template match="*[parent::account-properties | parent::unentitled-type]">
<xsl:template>
</xsl:template>
```

The above file can be saved in the following location as an XSLT stylesheet:

C:\unentitled-users.xsl

The following command changes the default stylesheet reference in the resulting XML output to point at the new file, and writes the results out to a file called output.xml:

vdmadmin -0 -lu -xml -xsltpath "C:\unentitled-users.xsl" > output.xml

If output.xml is now opened in a browser, the transformation contained in the referenced stylesheet is applied and the data is presented in tabular form.

Remove View Manager Entry

In order to ensure high-availability, View Manager allows one or more replica servers to be added to your VDI environment. During installation, the replica server is manually associated with an existing View Manager and its information is added to the local ADAM repository of all other similarly associated servers already present within your environment. Subsequent changes to global settings, users, or desktops are then propagated between all the servers in the connection group.

If a server is removed from the connection group through disconnection or uninstallation, the entry for that server will persist within each ADAM repository, and therefore in the View Servers section of the **Configuration** view within View Administrator for each remaining server.

This may be desired behavior, such as in instances where the disconnection is temporary. If the removal is permanent, you can use the Command Line Tool to remove the server entry from the View Servers list.

The commands and associated parameters are described in Table 7 and Table 8.

| Table 7. | Remove | View | Manager | Entry | Comma | ands |
|----------|--------|------|---------|-------|---------------------------|------|
|----------|--------|------|---------|-------|---------------------------|------|

| Command | Description | Usage |
|---------|------------------------------|--------------------------------------|
| -S | Manage a View Manager entry. | -S -r -s <server_name></server_name> |

Table 8. Remove View Manager Entry - Parameters

| Parameter | Description |
|--------------------------------|--|
| -r | Remove a View Manager entry from the local ADAM instance. This information is then propagated throughout any other standard or replica servers remaining in the cluster. |
| -s <server_name></server_name> | Name of the View Manager server. |

NOTE This tool must be executed on one of the remaining servers in the cluster and not on the server that is being uninstalled.

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

VMware, Inc. 3401 Hillview Ave., Palo Alto, CA 94304 www.vmware.com

7

Copyright © 2008 VMware, Inc. All rights reserved. Protected by one or more of U.S. Patent Nos. 6,397,242, 6,496,847, 6,704,925, 6,711,672, 6,725,289, 6,735,601, 6,785,886, 6,789,156, 6,795,966, 6,880,022, 6,944,699, 6,961,806, 6,961,941, 7,069,413, 7,082,598, 7,089,377, 7,111,086, 7,111,145, 7,117,481, 7,149, 843, 7,155,558, 7,222,221, 7,260,815, 7,260,820, 7,269,683, 7,275,136, 7,277,998, 7,277,999, 7,278,030, 7,281,102, 7,290,253, 7,356,679, 7,409,487, 7,412,492, 7,412,702, 7,424,710, and 7,428,636; patents pending. VMware, the VMware "boxes" logo and design, Virtual SMP, and VMotion are registered trademarks or trademarks of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.