Table of Contents

1 **VDES Management Console** ........................................................................................................... 4

2 **License Manager** ................................................................................................................................. 5

3 **VDES Farm Management** .................................................................................................................. 6
   3.1 Host Uptime ........................................................................................................................................ 7
   3.2 Data Collector Configuration .............................................................................................................. 8
       3.2.1 General Configuration Settings .............................................................................................. 9
       3.2.2 SMTP Configuration Settings .................................................................................................. 9
   3.3 XAppNow Configuration ...................................................................................................................... 10
       3.3.1 General Configuration Settings .............................................................................................. 11
       3.3.2 SMTP Configuration Settings .................................................................................................. 11
       3.3.3 XAppNow Agent Configuration Settings .............................................................................. 11
       3.3.4 Support Info Configuration Settings .......................................................................................... 12
   3.4 Reboot Managed Host Configuration ................................................................................................. 13
       3.4.1 General Configuration Settings .............................................................................................. 14
       3.4.2 SMTP Configuration Settings .................................................................................................. 14
       3.4.3 Support Info Configuration Settings .......................................................................................... 15
   3.5 Web Interface and Storefront Host Configuration ............................................................................... 16
       3.5.1 General Configuration Settings .............................................................................................. 17
       3.5.2 Storefront Configuration Settings ............................................................................................. 17
   3.6 VMView Interface Host Configuration ............................................................................................... 18
       3.6.1 General Configuration Settings .............................................................................................. 19
   3.7 Starting and Stopping VDES Host Service ......................................................................................... 20
   3.8 Modifying Settings for Multiple Hosts ............................................................................................... 21

4 **Reboot Manager** ................................................................................................................................. 22
   4.1 General Settings ............................................................................................................................... 23
   4.2 Recurrence .......................................................................................................................................... 24
       4.2.1 Daily........................................................................................................................................... 24
4.2.2 Weekly .......................................................................................................................... 24
4.2.3 Monthly .......................................................................................................................... 25
4.2.4 Yearly ............................................................................................................................. 25
4.3 Notifications .................................................................................................................... 26
4.4 Pre/Post Reboot Commands ............................................................................................ 26
4.5 Assigning Servers ............................................................................................................ 27
4.6 Drain Mode Commands .................................................................................................... 28
  4.6.1 Default Method pre-XenApp 7.6 .................................................................................. 28
  4.6.2 Default Method XenApp 7.6 ........................................................................................ 28
  4.6.3 Alternate Method ......................................................................................................... 29
  4.6.4 GPO Considerations .................................................................................................... 29
5 XAppNow Agent Help Desk ................................................................................................ 30
6 Battery Monitor .................................................................................................................. 31
7 Log Files ................................................................................................................................ 32
  7.1 VDES Host ...................................................................................................................... 32
  7.2 XAppNow Agent ............................................................................................................. 33
1 **VDES Management Console**

Located in the installation folder and can be launched by running ctsvdes.msc. A shortcut is also added to the start menu.

The servers in the MMC are populated starting with the Data Collector(s). The other hosts check in with the Data Collector periodically and should be automatically added to the MMC. However, hosts can be added manually to a node by right clicking and selecting “add”.
## 2 License Manager

License manager allows you to set the licensed product key for the hosts. Typically, this is set during installation but can be updated if you add/modify products or have an expiring license key.
3 VDES Farm Management

Each host that has VDES installed should be added automatically to the proper node. If a server fails to check in with the Data Collector then it can be added manually by right clicking on the appropriate node and selecting add.

Note: A server can be listed twice if it has two functions. For example if a host is a Published Desktop server with XAppNow installed and is also a Data Collector, it will be listed under both nodes.
3.1 Host Uptime

Clicking on the parent node in the tree displays the host list with current host uptime. The uptime is refreshed approximately every 10 seconds.
3.2 Data Collector Configuration

Clicking on a host in the collection displays the current configuration. Additional actions allow you to refresh the data, remove the host from the collection, or stop/start VDES host service.

To make changes simply double click on one of the settings to bring up the edit settings dialog box.
3.2.1 General Configuration Settings

- Primary Data Collector – changing the primary data collector host
- Secondary Data Collector – changing the secondary data collector host
- Enable Logging – turning logging on or off for the VDES service.
- Log File – specifying the full path and name of the log file (relative to the host)
- Drain Mode Command(s) – command(s) to run to put server into drain mode (see Drain Mode Commands in Reboot Manager for more detail).
- Drain Cancel Command(s) – command(s) to run to cancel drain mode (see Drain Mode Commands in Reboot Manager for more detail).
- Registering Sessions by IP – only available for XAppNow hosts that are not also data collectors.

Note: These settings will take immediate affect at the host.

3.2.2 SMTP Configuration Settings

Required for SMTP notifications from reboot manager.

- Mail Server – the SMTP outgoing mail server.
- Mail Server Port – the SMTP outgoing mail server port.
- Email Address – the email address to appear in the “From” field of message.
- Requires SSL – enable if the SMTP server requires SSL.
- Requires Authentication – enable if the SMTP server requires authentication.
- Username – the username to use for authentication.
- Password – the password to use for authentication.

Note: These settings will take immediate affect at the host.
3.3 XAppNow Configuration

Clicking on a host in the collection displays the current configuration. Additional actions allow you to refresh the data, remove the host from the collection, or stop/start VDES host service.

To make changes simply double click on one of the settings to bring up the edit settings dialog box.
3.3.1 General Configuration Settings

- Primary Data Collector – changing the primary data collector host
- Secondary Data Collector – changing the secondary data collector host
- Enable Logging – turning logging on or off for the VDES service.
- Log File – specifying the full path and name of the log file (relative to the host).
- Drain Mode Command(s) – command(s) to run to put server into drain mode (see Drain Mode Commands in Reboot Manager for more detail).
- Drain Cancel Command(s) – command(s) to run to cancel drain mode (see Drain Mode Commands in Reboot Manager for more detail).
- Registering Sessions by IP – hosts registers with data collector by IP instead of its hostname.

Note: These settings will take immediate affect at the host.

3.3.2 SMTP Configuration Settings

Required for SMTP notifications from reboot manager.

- Mail Server – the SMTP outgoing mail server.
- Mail Server Port – the SMTP outgoing mail server port.
- Email Address – the email address to appear in the “From” field of message.
- Requires SSL – enable if the SMTP server requires SSL.
- Requires Authentication – enable if the SMTP server requires authentication.
- Username – the username to use for authentication.
- Password – the password to user for authentication.

Note: These settings will take immediate affect at the host.

3.3.3 XAppNow Agent Configuration Settings

- Allow Exit – enable/disable allowing the user to exit or close the agent down. Default is disabled.
- Citrix Dialog Tracking – enable/disable automatic closing of the Citrix “There are no sessions available for reconnection” dialog. Default is disabled.
- Logon Reconnects – enable/disable running a reconnect on a user desktop logon. If Imprivata is installed, the preferred method is to configure an Imprivata policy to handle logon reconnects.
- Disconnect Executable – the program to run to disconnect applications. The default is “pnagent.exe /disconnect” for pre-4.2 receiver and “SelfService.exe -disconnectapps” for 4.2 and later.
- Disconnect Run Command(s) – command(s) to run prior to running pnagent /disconnect.
- Reconnect Executable – to program to run to reconnect applications. The default is “pnagent.exe /reconnect” for pre-4.2 receiver and “SelfService.exe -reconnectapps” for 4.2 and later.
- Reconnect Run Command(s) – command(s) to run prior to running pnagent /reconnect.
- Enable Logging – turning logging on or off for the VDES agent.
- Log File – specifying the full path and name of the log file (relative to the host)
Note: These settings will take affect when the user’s session reconnects.

3.3.4 Support Info Configuration Settings

- Label for Client Name – the label used in the Help Desk Information dialog. Default is “Client Name:”
- Label for Client IP – the label used in the Help Desk Information dialog. Default is “Client IP:”
- Label for Logon Domain – the label used in the Help Desk Information dialog. Default is “Logon Domain:”
- Label for User Name - the label used in the Help Desk Information dialog. Default is “User Name:”
- Battery Monitor – if the Battery Monitor product is installed, you can enable/disable its use.

Note: These settings will take affect when the user’s session reconnects.
3.4 Reboot Managed Host Configuration

Reboot Managed hosts are servers that only have the reboot managed components. Clicking on a host in the collection displays the current configuration. Additional actions allow you to refresh the data, remove the host from the collection, or stop/start VDES host service.

To make changes simply double click on one of the settings to bring up the edit settings dialog box.
3.4.1 General Configuration Settings

- Primary Data Collector – changing the primary data collector host
- Secondary Data Collector – changing the secondary data collector host
- Enable Logging – turning logging on or off for the VDES service.
- Log File – specifying the full path and name of the log file (relative to the host).
- Drain Mode Command(s) – command(s) to run to put server into drain mode (see Drain Mode Commands in Reboot Manager for more detail).
- Drain Cancel Command(s) – command(s) to run to cancel drain mode (see Drain Mode Commands in Reboot Manager for more detail).
- Registering Sessions by IP – only available for XAppNow hosts that are not also data collectors.

Note: These settings will take immediate affect at the host.

3.4.2 SMTP Configuration Settings

Required for SMTP notifications from reboot manager.
- Mail Server – the SMTP outgoing mail server.
- Mail Server Port – the SMTP outgoing mail server port.
- Email Address – the email address to appear in the “From” field of message.
- Requires SSL – enable if the SMTP server requires SSL.
- Requires Authentication – enable if the SMTP server requires authentication.
- Username – the username to use for authentication.
- Password – the password to use for authentication.

Note: These settings will take immediate affect at the host.
3.4.3 Support Info Configuration Settings

- Allow Exit – enable/disable allowing the user to exit or close the agent down. Default is disabled.
- Enable Logging – turning logging on or off for the VDES agent.
- Log File – specifying the full path and name of the log file (relative to the host)
- Label for Client Name – the label used in the Help Desk Information dialog. Default is “Client Name:”
- Label for Client IP – the label used in the Help Desk Information dialog. Default is “Client IP:”
- Label for Logon Domain – the label used in the Help Desk Information dialog. Default is “Logon Domain:”
- Label for User Name - the label used in the Help Desk Information dialog. Default is “User Name:”
- Battery Monitor – if the Battery Monitor product is installed, you can enable/disable its use.

Note: These settings will take affect when the user’s session reconnects.
Clicking on a host in the collection displays the current configuration. The Web Interface/Storefront host list each site where XAppNow is installed and allows the changing of the values on a per-site basis. Additional actions allow you to refresh the data, remove the host from the collection, or stop/start VDES host service.

To make changes simply double click on one of the settings to bring up the edit settings dialog box.
3.5.1 General Configuration Settings

- Primary Data Collector – changing the primary data collector host
- Secondary Data Collector – changing the secondary data collector host
- Async Mode – determines if message to XAppNow Data Collector should be sent asynchronously. Recommended value is “No”
- ICA Hold – the number of milliseconds to hold up connection to the PD (Desktop Provider) while the PA (Application Providers) applications reconnect. This is helpful in situations where PD desktop reconnect times are short, but PA’s application reconnect times are much longer, causing the user to wait while their applications appear on their desktop. This helps create a better user experience. (Not applicable if in Async mode).

Note: These settings will take immediate affect at the host.

3.5.2 Storefront Configuration Settings

Storefront has the same settings at WI with the following additional settings

- Convert Device IP to Name – in some cases the device name isn’t passed to storefront so to get the proper IP name, the IP is converted using DNS to the hostname.

Note: These settings will take immediate affect at the host.
3.6 VMView Interface Host Configuration

VMView Interface hosts are servers that interface with VMView connection servers. Clicking on a host in the collection displays the current configuration. Additional actions allow you to refresh the data, remove the host from the collection, or stop/start VDES host service.

To make changes simply double click on one of the settings to bring up the edit settings dialog box.
3.6.1 General Configuration Settings

- Primary Data Collector – changing the primary data collector host
- Secondary Data Collector – changing the secondary data collector host
- Enable Logging – turning logging on or off for the VDES service.
- Log File – specifying the full path and name of the log file (relative to the host).
- Connection Server – most likely localhost.
- Connection Server Port – port connection server is running on.
- VDES View Service Port – port VDES View service is running on. Note: This is the port that the view clients will be configured to use.
- SSL Certificate – the SSL certificate that will be used to communicate with the view clients.

Note: These settings will take affect at the host in approximately 15 seconds except for the VDES View Service Port which will require a restart of the VDES View Service. Right click on the host name to restart the VDES View Service.
3.7 Starting and Stopping VDES Host Service

Right click on any host in the VDES Farm to bring up a popup menu that allows you to stop (or start) the VDES host service. You can also refresh the data or remove it from the collection.
3.8 Modifying Settings for Multiple Hosts

Clicking on the parent node in the tree displays the host list with current host uptime. Right click then select settings.

Note: Settings that are the same across all the selected hosts will be displayed, settings that are not the same will be blank or in the case of checkboxes set to indeterminate.
Manages the automatic reboot of any host with VDES installed. Hosts are scheduled for reboot by creating a reboot schedule. To create a new schedule either use the “Add Reboot Schedule” in the action panel or right click on the Reboot Manager node.
4.1 General Settings

The following are the general settings for reboot schedules:

- **Description** – description of the schedule
- **Start Drain** – either by date/time or uptime threshold to start draining.
- **Wait for all sessions to drain before reboot** – if selected, reboot will occur as soon as all active sessions are drained from the host.
- **Force Reboot** – if selected, reboot will occur at the specified time regardless of state of sessions. Note: if the time of day for forced reboot is before the drain start time then the reboot will occur on the following day. For example, start drain at 10PM with a force reboot of 2AM. Start draining will occur at 10PM but the reboot will not occur until 2AM of the following day.
- **Reboot warning** – if force reboot is selected then a warning is issued to users starting at X minutes before and for every X minute until reboot is forced. This warning is not issued if just Wait for sessions to drain is selected as reboot will not occur until every session is closed.
- **Schedule Active** – enable/disable schedules.
4.2 Recurrence

The reboot schedule can be set to recur daily, weekly, monthly or yearly.

4.2.1 Daily

A daily reboot schedule will reboot the host every X days or every weekday.

4.2.2 Weekly

A weekly reboot schedule will reboot the host on specific days every X weeks.
4.2.3 Monthly

A monthly reboot schedule will reboot the host either the specified day of the month every X months or the specified day of the week every X months.

4.2.4 Yearly

A yearly reboot schedule will reboot the host either the specified date every X years or the specified week every X years.
4.3 Notifications

Reboot events can be written to the local eventlog or emailed to address(es) indicated. The events are as follows:

- Start Drain – the server is placed into drain stop mode
- Reboot Initiated – the server has started to reboot
- Reboot Complete – the server has rebooted and the VDES service started
- Active Connections – RDP/ICA connections have been detected on the host

4.4 Pre/Post Reboot Commands

Commands can be entered to run prior to rebooting the host and after the host has rebooted.
4.5 Assigning Servers

Any server with VDES installed and licensed for reboot manager will appear as in the Available Server list. To assign the schedule to the host, simply select the hostname and press the “>>” button. Likewise, to remove the host from the schedule, simply select the hostname and press the “<<” button.
4.6 Drain Mode Commands

4.6.1 Default Method pre-XenApp 7.6

The default method for putting a server into and out of Drain Mode is to use Powershell and the Citrix.XenApp.Commands as documented in http://blogs.citrix.com/2013/03/14/how-to-put-xenapp-servers-to-maintenance-mode/

**Drain Mode:** powershell.exe -noprofile -command "Add-PSSnapIn Citrix.XenApp.Commands; Set-XAServerLogonMode -ServerName %ComputerName% -LogonMode ProhibitNewLogOnsUntilRestart"

**Drain Cancel:** powershell.exe -noprofile -command "Add-PSSnapIn Citrix.XenApp.Commands; Set-XAServerLogonMode -ServerName %ComputerName% -LogonMode AllowLogOns"

These commands require that the account that the CTSVDES service is running as have administrative rights in Citrix to change logon mode. This can be accomplished by creating a service account, giving Citrix admin rights to that account and then changing the CTSVDES service from Local System to the service account.

4.6.2 Default Method XenApp 7.6

The default method for putting a server into and out of Drain Mode for 7.6 and later is to also use Powershell but with different parameters

**Drain Mode:** powershell.exe -noprofile -command "Add-PSSnapin Citrix.Broker.Admin.V2; Set-BrokerMachineMaintenanceMode -AdminAddress FQDMofDDC –InputObject DOMAIN\$env:computername $true"

**Drain Cancel:** powershell.exe -noprofile -command "Add-PSSnapin Citrix.Broker.Admin.V2; Set-BrokerMachineMaintenanceMode -AdminAddress FQDMofDDC -InputObject DOMAIN\$env:computername $false"

Where DOMAIN is the netbios name of the domain and FQDMofDDC is the fully qualified domain name of the DDC. These commands require that the account that the CTSVDES service is running as have administrative rights in Citrix to change logon mode. This can be accomplished by creating a service account, giving Citrix admin rights to that account and then changing the CTSVDES service from Local System to the service account.

The script file vdes_reboot_mainoff.ps1 also needs to be run after reboot. This can be setup as a scheduled task or added to the reboot schedule as a post reboot command.
4.6.3 Alternate Method

An alternative method is to use “Change logon” as documented in http://support.citrix.com/article/CTX564871. Change the Drain command(s) to the following.

**Drain Mode:** change logon /drainuntilrestart

**Drain Cancel:** change logon /enable

4.6.4 GPO Considerations

If Remote Sessions is enabled via GPO then the “change logon” alternate method will fail with the message “Connects are currently ENABLED by Group Policy”.

This can be tested by running “change logon /drainuntilrestart” from a command prompt. If you get a GPO failure message, you have to either not configure that policy or not allow that policy to be applied to the XenApp servers. If GPO must be applied then you must use the default method of draining via Powershell.
5 XAppNow Agent Help Desk

XAppNow should be installed on Published Desktop servers and VDI host machines. The agent coordinates the reconnection of the published applications prior to the end point connecting to the desktop.

The agent appears as a “C” (for Coretek Services) in the task bar tray. When the user hovers over the icon, the Virtual Desktop Server they are connected to will appear as well as the Client Name of the endpoint.

If the user double clicks on the icon, more detail information is shown to assist in troubleshooting.

<table>
<thead>
<tr>
<th>System Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual Desktop Server: XA65PD</td>
</tr>
<tr>
<td>Client Name: AMADEUS</td>
</tr>
<tr>
<td>Client IP: 172.0.0.0</td>
</tr>
<tr>
<td>User Name: d</td>
</tr>
<tr>
<td>Logon Domain: C</td>
</tr>
<tr>
<td><img src="image_url" alt="System Information" /></td>
</tr>
</tbody>
</table>
6 Battery Monitor

For Citrix Published Desktop servers and window’s based clients, the battery state of the endpoint can be monitored from within the virtual session. Battery monitor must be installed and enabled on the Published Desktop and the Battery Monitor Client must be installed on the end-point.

The battery state of the endpoint and the endpoint hostname will appear in window when the user hovers over the Battery Monitor icon.
7 LOG FILES

7.1 VDES Host

Enable logging in the VDES Admin console by setting Enable Logging to true and specifying a log file with complete path. The folder for the log file should have sufficient rights for the service typically running under the Local System account to create and write to files.

Log Entry showing logon and successful communication with agent:
09/10/2013 17:01:13.671 Session 5 logon by user 'Nurse'. IsICA=1. IsVDIDesktop=0.
09/10/2013 17:01:13.671 Session 5 agent channel opened.

Log Entry showing receipt of data from web interface and forwarding to agent:
09/10/2013 17:01:50.374 Processing request POST /SOAP.
09/10/2013 17:01:50.374 Found user 'Nurse' in session 5.
09/10/2013 17:01:50.375 Send data to agent in session 5.
09/10/2013 17:01:50.375 Agent acknowledged data received in session 5.
09/10/2013 17:01:50.375 Done Processing request.

Log Entry showing receipt of data from web interface and not forwarded to agent:
09/10/2013 16:59:03.491 Found user 'Nurse' in session 2.
09/10/2013 16:59:03.491 Send data to agent in session 2.
09/10/2013 16:59:03.991 Agent failed to acknowledge data received in session 2.

**Check that agent is started and running in session 2.

**If host is not receiving any requests, check that web interface is properly configured.
7.2  XAppNow Agent

Enable logging in the VDES Admin console by setting Enable Logging to true and specifying a log file with complete path. The folder for the log file should have sufficient rights for a member of the Authenticated Users group to create and write to files.

Log Entry showing logon and successful communication with host:
09/12/2013 08:57:37.768 Setting initial WFClient to 'CTXDEMO-C1' for session 2.
09/12/2013 08:57:37.768 Opened host channel for session 2.

Log Entry showing receipt of data from host service:
09/12/2013 08:59:47.783 Host event triggered.
09/12/2013 08:59:47.784 Data received from host for session 2.
09/12/2013 08:59:47.784 Process request(s) from host for session 2.
09/12/2013 08:59:47.784 Initiate an ICA reconnect for session 2 to ClientName 'CTXDEMO-C1' (IsConnected=0).

Log Entry showing user reconnected to session but agent did not get prior notification from host:
09/12/2013 08:59:50.252 Session 2 connect detected.
09/12/2013 08:59:50.252 Session connect detected without prior reconnect notification.

**Check that host is running on the Published Desktop/VDI Desktop
**Check host log for any errors