

QShell

Admin Guide

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ABSTRACT

This document provides an overview of QShell with install and configuration information together with some use cases examples.

DISCLAIMER

This application is freeware developed by myself (Systems Consultant at Quest Software – Desktop Virtualisation Group) it comes as is and is used at your own risk; it is not an Official Quest Software product release and cannot be supported in such a way.

However, hopefully you will find it useful and problem free.

INTRODUCTION

The Problem

When using thin client devices the login procedure for the user to receive their VDI or Terminal Services (TS) can be cumbersome, especially when trying to replicate a standard PC environment. Currently the procedure would be:

1. User powers on device
2. Device boots into OS and the user logs in
3. User loads AppPortal or Web Access (internet browser) and logs in.
4. User clicks desired desktop icon and the VDI or TS desktop loads.

Sure this could be improved in various ways but having two desktops to login to can confuse users. You could also replace the windows shell with either AppPortal or an internet browser, however when the user disconnects the VDI or TS desktop and closes AppPortal or the internet browser they could be left with a blank screen and nowhere to go.

The Solution

QShell is a small application designed to replace the Windows shell on client devices and provide an improved login experience for the end user. QShell is configured to load another application; typically AppPortal, Internet Explorer or the vWorkspace Remote Desktop client (pntsc.exe). QShell will also monitor the VDI or TS sessions and will run an event when the user logs off. This event can be log the user off the client device or display the QShell interface. The QShell interface provides the user with connect, log off, reboot and shutdown options.

QShell can also be used to increase the life cycle of aging PC running Windows XP.



PREREQUISITES

QShell is a Microsoft .Net 2.0 application and therefore requires the .Net 2.0 framework to be installed. To install on thin client device please refer to the manufactures guide lines for installing .Net 2.0. For Windows XP install via Windows Update.

SUPPORTED OPERATING SYSTEMS

- Windows XPe
- Windows XP
- Windows Fundamentals
- Windows Vista
- Windows 2000 (Not tested)

SCREEN SHOT

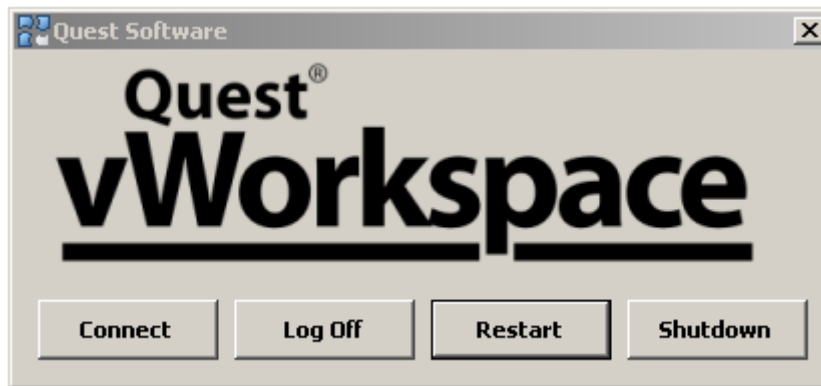


Figure 1 - QShell Interface

INSTALLATION

Configuring the Client Device

1. Install the Quest AppPortal or Web Client
2. Install Microsoft .NET 2.0 framework (Refer to client device manufacture for advise)
3. Create a "QShell" folder under "C:\Program Files\Quest Software\"
4. Copy the contents of the qShell.zip file into QShell folder, which are:
 - a. qShell.exe
 - b. qShell.exe.manifest
 - c. vWorkspace.ico
 - d. qShell.exe.config
 - e. readme.txt
5. Edit the qShell.exe.config as desired. (See QShell.exe.config and use examples for more details)
6. Change the registry
 - a. Run Regedit from Start > Run
 - b. Change windows shell key to run QShell.exe e.g.

```
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon\shell =  
C:\Program Files\Quest Software\QShell\ QShell.exe
```

- c. Reboot client device

Once the machine has rebooted when the user logs in they will no longer see windows explorer, desktop icons, start menu or the task bar.

Client Device Administration

Should the administrator want to make changes to the qShell settings (see QShell.exe.config section for more details) or other device settings manually they should log into the client device with administrator privileges and press ctr + alt + del and open the Task Manager. Then by selecting file > run the administrator can enter the following commands:

Command	Result
Control	Control Panel
Explorer	Windows Explorer (My Documents)
Iexplore	Internet Explorer

QShell.exe.config

QShell is configured via a qshell.exe.config file located in the same folder as qshell.exe. The following settings can be found under the <applicationSettings> section.

- **ShellApp** – The full path to the application required to start automatically. Typically this is Internet Explorer, AppPortal (pnap32.exe) or pnstc.exe.
- **ShellArgs** - Application arguments to pass in upon launch. e.g.” -k http://my.webaccessportal.com/provision/web-it/” with Internet Explorer. This will open internet explorer in kiosk mode and run the Web Access Portal
- **AutoLogOff** - Turns the automatic log off event on or off. May not be required when the interface is used. This event will trigger when the last process (LogOffOn) exits. Best used when the client is in a domain and there is no auto login on a thin client set.
- **LogOffOn** – Required when AutoLogOff is set. The application name to monitor, for example pntsc.exe is the executable that makes the connection to the managed application or VDI desktop. Setting this to “pnstc” (note no .exe extension) will mean when the last pntsc.exe process exits the user will be logged off the client.
- **Test** – Test mode for AutoLogOff. When set to 1 a message box will be displayed, when set to 0 the user will be logged off.
- **WindowStateMinimsed** - When set to 1 shelled application will start minimize, when set to 0 shelled application will start normally. Used in conjunction with ShellApp.
- **ShowApp** - Show or hides the QShell interface window. The interface presents the user with connect, logoff, restart and shutdown buttons. When AutoLogOff is disabled and the last LogOffOn application exits the interface will be brought to the front.
- **KillShellApp** – On the "LogoffOn" Event the ShellApp will be terminated. 0 = No & 1 = Yes. Used if you want the ShellApp to quit but you don't want the user logged off. The user will be presented the QShell interface. E.g. You want AppPortal to be terminated when the user logs off their VDI sessions and be presented the QShell interface.

- **ShellAppName** - Should match "ShellApp" setting but just the exe name and not the extension. e.g. "pnapp32" used for KillShellApp setting and normally matches ShellApp but not the full path.
- **OnAppExit**- When user closes the QShell application the following events can be activated;
 - Logoff (defined as "logoff")
 - Shutdown (defined as "shutdown")
 - Restart (defined as "restart")
 - Nothing or disabled (defined as "off" or leave blank)
- **StickyWindow** – Disabled or enable the ability fo the user to move the interface. 0 user can move interface, 1 user is prevented from moving interface.
- **RunAutoCntCmd** - 0 is disabled, 1 the connect button will fire. Typically used when killing the shellapp (e.g. Internet Explorer) and you want to restart it again when the user logs off their desktop session.



USE EXAMPLES

Auto load AppPortal and Desktop (no interface)

- Single sign on
- User logs into client device with domain credentials
- VDI / TS desktop auto loads (No desktop displayed on client device)
- User logs off or disconnects desktop
- QShell logs user off client device.
- Client device ready for next user

Required qShell.exe.config settings

Setting Name	Setting
ShellApp	C:\Program Files\Quest Software\vWorkspace Client\pnap32.exe
AutoLogOff	1
LogOffOn	pnstsc
ShowApp	0
OnAppExit	off
ShellArgs	Leave blank

Environment requirements

Requirement	Detail
Client device in domain	Yes
AppPortal	Configure to auto launch managed application
AppPortal	Credentials Pass-Through enabled

Auto load AppPortal and Desktop (with interface)

- Single sign on
- User logs into client device with domain credentials
- VDI / TS desktop auto loads (No desktop displayed on client device)
- User logs off or disconnects desktop
- QShell displays its interface (with connect, log off, reboot, shutdown options)
- User will be required to log off or shutdown

Required qShell.exe.config settings

Setting Name	Setting
ShellApp	C:\Program Files\Quest Software\vWorkspace Client\pnap32.exe
AutoLogOff	0
LogOffOn	pntsc
ShowApp	1
OnAppExit	off
ShellArgs	Leave blank

Environment requirements

Requirement	Detail
AppPortal	Configure to auto launch managed application
AppPortal	Credentials Pass-Through enabled
Client device in domain	Yes

Auto load internet explorer in kiosk mode (with QShell interface and no client auto log off)

- Single sign on
- Client device is configured to auto login
- QShell runs Internet Explorer passing kiosk switch and Web Access URL
- User logs into Web Access with domain credentials
- VDI / TS desktop auto loads (No desktop displayed on client device)
- User logs off or disconnects desktop
- QShell displays its interface (with connect, log off, reboot, shutdown options)

Required qShell.exe.config settings

Setting Name	Setting
ShellApp	C:\Program Files\Internet Explorer\iexplore.exe
AutoLogOff	0
LogOffOn	pntsc
ShowApp	1
OnAppExit	off
ShellArgs	-k http://your.domain.com/provision/web-it/

Environment requirements

Requirement	Detail
Client device	Configure to auto login with local user. Thin Clients often have this feature built in. For XP refer to http://support.microsoft.com/kb/315231
Web Access	Configured to auto load managed application.



Auto load internet explorer in kiosk mode (credentials pass through to web access)

- Single sign on
- User logs into Web Access with domain credentials
- QShell runs Internet Explorer passing kiosk switch and Web Access URL
- User is not required to log into Web Access
- VDI / TS desktop auto loads (No desktop displayed on client device)
- User logs off or disconnects desktop
- QShell displays its interface (with connect, log off, reboot, shutdown options)
- User will be required to log off or shutdown

Required qShell.exe.config settings

Setting Name	Setting
ShellApp	C:\Program Files\Internet Explorer\iexplore.exe
AutoLogOff	0
LogOffOn	pntsc
ShowApp	1
OnAppExit	off
ShellArgs	-k http://your.domain.com/provision/web-it/

Environment requirements

Requirement	Detail
Client device	Joined to domain
Web Access	Configured to auto load managed application.
Web Access	Configured for Kerberos credentials pass-through



Auto load internet explorer in kiosk mode (credentials pass-through to web access, auto log off client)

- Single sign on
- User logs into Web Access with domain credentials
- QShell runs Internet Explorer passing kiosk switch and Web Access URL
- User logs into Web Access with domain credentials
- VDI / TS desktop auto loads (No desktop displayed on client device)
- User logs off or disconnects desktop
- QShell and logs the user off the client device

Required qShell.exe.config settings

Setting Name	Setting
ShellApp	C:\Program Files\Internet Explorer\iexplore.exe
AutoLogOff	1
LogOffOn	pnstsc
ShowApp	0
OnAppExit	off
ShellArgs	-k http://your.domain.com/provision/web-it/

Environment requirements

Requirement	Detail
Client	Joined to domain
Web Access	Configured to auto load managed application.
Web Access	Configured for Kerberos credentials pass-through

Auto load pnstsc.exe (credentials pass-through – no interface)

- Single sign on
- User logs into client device with domain credentials
- QShell runs pnstsc.exe passing pit file location arguments
- VDI / TS desktop auto loads (No desktop displayed on client device)
- User logs off or disconnects desktop
- QShell and logs the user off the client device



Required qShell.exe.config settings

Setting Name	Setting
ShellApp	C:\Program Files\Quest Software\vWorkspace Client\pntsc.exe
AutoLogOff	1
LogOffOn	pntsc
ShowApp	0
OnAppExit	off
ShellArgs	\\SERVER\FILESHARE\desktop.pit

Environment requirements

Requirement	Detail
Client device	Joined to domain
Pntsc.exe	Pit file saved from pntsc.exe to file share (or local device) with desktop managed application and credentials pass-through configured.

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Quest Software, Inc. delivers innovative products that help organizations get more performance and productivity from their applications, databases and Windows infrastructure. Through a deep expertise in IT operations and a continued focus on what works best, Quest helps more than 50,000 customers worldwide meet higher expectations for enterprise IT. Quest Software can be found in offices around the globe and at www.quest.com.

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