

Best Practices for Managing PROXY Pro Host Settings

This document addresses the following: How can I change Host settings across dozens/hundreds/thousands of machines?

Introduction: The PROXY Pro Host is the client application in all Proxy Networks remote desktop software products and is typically deployed with a transform file that would contain and apply respective settings. These settings range from a license key, a beep on connect being on or off, a permission to connect dialog box presented to the end user and much more. In a perfect world, a customer's ideal string of Host settings would be applied right at install time, although there are situations where they may need to change the settings on their Host computers due to an internal policy change in the future. For example, some customers that once launched connections to Host computers without prompting the user for permission may have since decided that their new policy should require end user approval for any remote desktop support sessions. This requires a minor setting change on the Hosts and can be achieved in several ways covered in this document.

From the perspective of our support team, we think it's healthy to revisit the Host settings every couple of years to ensure that decisions made about them years ago are still applicable and relevant today. We want our customers feeling comfortable about managing the settings found within the Proxy Host Control Panel across fleets of machines.

HIGH LEVEL OVERVIEW: 3 APPROACHES TO MANAGING HOST SETTINGS (and 2 bonus methods)

Approach 1: Using PhSetup, the Host's command line configuration utility

This approach is most effective when the devices are managed by an Active Directory and can have startup/login scripts run against the Hosts. If all of, or the vast majority of Host computers are already managed this way, it's common practice to add a PhSetup command to an existing script to ensure all Hosts conform to the same settings.

Approach 2: Using the PROXY Pro Deployment Tool's Update Host Settings capability

The PROXY Pro Deployment Tool has a built-in capability that can be used to push a Host settings template out to existing Host machines that are currently within the same network as the computer running the Deployment Tool. If all or the vast majority of the Host computers are domain-joined, and are within the same LAN this is a great approach.

Approach 3: Host Settings Updater Tool

Installed with any modern Deployment Tool, the Host Settings Updater Tool connects to your Hosts leveraging your existing RAS server and can apply settings templates remotely. This method works best if all or the vast majority of Hosts are currently reporting into your PROXY Pro RAS server successfully. If for example 480 of 500 Hosts are currently online, all 480 will be updated and the remaining 20 will be updated the next time they are booted and are once again reporting into the RAS server.

Bonus Methods

In certain circumstances, it may be necessary or at least convenient knowing how to go about changing one and only one Host's settings remotely. For a one-off edit here and there, you may be interested to learn how to do that should the need arise.

Each of these methods will be discussed in detail in the rest of this document.

Approach 1: Introducing PhSetup.exe, the Host's command line configuration utility

Built into the installation directory of the Host is PhSetup.exe and it's the command line configuration utility for the Host. It's used to make any settings changes needed and the command typically is triggered to run within Active Directory as a startup or login script. This is ideal if you don't need the change applied instantaneously but can wait until the computers boot next.

The following requirements must be met for this method:

- Ability to use AD/GPO to insert a command that can run at startup or login
- Must be run as a user that is an administrator on the Host computers

Below is a sample PhSetup command – this one configures the Host to stop reporting to any/all Gateways and to begin reporting to Gateway1 and Gateway2, also known as the PROXY Pro RAS server address (proxypro.mycompany.com).

```
"C:\Program Files (x86)\Proxy Networks\Host\PhSetup.exe" removegateway:all  
addgateway:"WSS|443,proxypro.mycompany.com" addgateway:"WSS|443,proxypro2.mycompany.com"
```

Note that the Host has its own set of security controls that define which users/groups are permitted to make changes to the Host settings. By default, any user that is a member the Host's local administrators group will be able to make changes. The location of this is found on the Proxy Host Control Panel -> Security tab -> Set Permissions button -> Settings Security. If the security defaults have not been changed no special instructions apply – just make sure the PhSetup command runs as a user with rights.

Each PhSetup command is listed within the Host manual so you can build your own by referencing that. However, there's a shortcut method you can use to cheat learning the syntax by having the Deployment Tool create the PhSetup syntax string for you. Assuming you have already made a settings template containing some settings, right-click that template -> All Tasks -> Copy command line string to clipboard. Paste this into notepad and you'll see a perfectly legible PhSetup command built for you. Make any necessary minor edits so that it appears in the format listed above and save it as a .bat file. Before testing the command, feel free to open your Proxy Host Control Panel to one of the tabs where changes are expected so that we can watch them change when you run the .bat file. Right-click your .bat file -> Run As Administrator, then review the Proxy Host Control Panel tabs to confirm that all expected changes have taken effect.

I'll close this section with one last piece of advice when crafting and testing your PhSetup command. It may be worthwhile that you insert the string `mode:interactive` into your command (the end is fine). Appending `mode:interactive` within your PhSetup command will cause a popup box to appear if there was any bad/misunderstood syntax. If your command successfully changes all desired settings and no warning box appeared, great – it is safe to remove `mode:interactive` from your command.

Approach 2: Using the PROXY Pro Deployment Tool's Update Host Settings

The PROXY Pro Deployment Tool is used to create an installation package for the Host and then deploy it, although deploying the Host can be done with a customer's referred software distribution approach. The tool also allows you to apply a settings template you've created out to one or many Hosts based on Active Directory OU container. This is ideal if all of the Host computers are within the same network and are powered on – if so the settings change will be applied instantaneously.

The following requirements must be met for this method:

- The PROXY Pro Deployment Tool should be run on a machine joined to the same domain as that of the Hosts
- The Host computers to be updated are within the same LAN as the Deployment Tool computer
- Host computers are powered on and are able to listen on their default listening port/protocol (TCP/UDP 1505)
- The user running the Deployment Tool is a member of the local administrators group on the Host*

*The reason this is important is because each Host you try to update will prompt you for credentials if the account you are running the tool as is not a member of the local administrators group on any given Host computer. The solution to this is to close the Deployment Tool and relaunch leveraging Run As... and run it as a user that does have rights to the Hosts. Because the Deployment Tool runs within MMC and MMC runs as a per-user basis, we'll want to export the Deployment Tool state (containing the config data) and import it as the new user. Right-click the top item in the left pane, Proxy Deployment Tool, and click Export to JSON. Save this state file some place safe. Then when you close and re-run the Deployment Tool as the new user, you can right-click the top item in the left pane to choose Import to load your state file and pick up where you left off moments ago.

Run the tool as a user that is a member of the Host computers' local administrators group. If you have created a settings template in the tool, expand Active Directory Domains in the left and right-click to refresh to find the contents. Your AD OU structure will appear – highlight a container in the left and the right pane will show you the computers. Right click a computer and choose Update Host Settings. Use the drop-down to select the settings template you had in mind (we assume you've created the settings template already).

If the Host security model is set to Windows Authentication, ignore the password box and hit OK.

If the Host security model is set to Simple Password, enter that password and hit OK.

There may be several OU containers so this update process may be needed several times. The right pane will give some indication that the selected Hosts have been successfully updated. The evidence of each successful round of updates will appear at the bottom of the left pane in the Deployment Tool, so you can use this to keep track of which had already been updated and also which failed. The Host computers to be updated do need to be powered on and if not, the update will fail with a connectivity failure code, to be expected in this scenario.

Approach 3: Host Settings Updater Tool

The Host Settings Updater Tool installs with the modern Proxy Deployment Tool and they complement one another. It's used to apply a string of Host settings to Hosts that are reporting to an existing PROXY Pro RAS server. For full documentation on the Host Settings Updater Tool, you'll find it on our documentation page: www.proxynetworks.com/documentation.

The following requirements must be met for this method:

- There is a PROXY Pro RAS server presently deployed and is fully operable
- The Hosts reporting to it presently have a good relationship/OK status with the Gateway
- Must know the Gateway service account credentials for authentication (DOMAIN\RemoteControlGateway) for best results however an account that is a member of the target Hosts' local administrators group is equally good
- The PC running the Host Settings Updater Tool can make an outbound connection to the Gateway on WSS 443
- A Host settings template has been created within the Proxy Deployment Tool whose .json string we can copy

Please follow along with the Host Settings Updater Tool guide found on the documentation page linked above. This document covers the steps to create a settings template in the Deployment Tool and then how to push that template of settings out.

A benefit this tool offers is its intelligent retry system. If 95 of 100 Hosts are report in and the remaining 5 are simply powered off/in transit like laptops may often be, the tool will update the Host settings on those machines the very moment they are powered on and have a network connection once again. At which point the Host will have contacted its server to make it known that it's available once again, which means it's now reachable by the updater tool. The tool will not try to re-update all 100 and instead focuses only on the machines that it has not successfully updated. It's acceptable to leave the tool running for several hours or days so that it will "catch" machines that may come online later.

A secondary benefit is that it does not require the machines to pickup a login/startup script let alone even be domain joined. Other methods like PhSetup require them to be managed devices and the Update Host Settings capability requires authenticating to the Host as a member of its administrators group. As long as the Host is on the machine and it's reporting to the PROXY Pro server and you know the Gateway service account credentials this method works around limitations potentially introduced by other methods.

Bonus Methods

These two methods are for one-off setting changes and are not meant for anything other than on a Host-by-Host basis but can be very helpful in certain circumstances.

Within the Host's installation directory you'll find PhAdmin.exe, which is the executable that launches the Proxy Host Control Panel. If you find it on your PC and run it, that's what it opens. It's possible to run this from the command prompt with a flag that will cause another machine's Proxy Host Control Panel to appear on *your* machine. It's ideal for a one-off edit. The following instructions assume you have the Host installed on your own system, the target Host computer is within your LAN and that the user account you'll be running the command prompt as is a member of the local administrators group on the target Host.

- 1) Open the command prompt as a user that is a member of the local admins group on the desired Host
- 2) Navigate to the directory to where the Host is installed to (C:\Program Files (x86)\Proxy Networks\Host\)
- 3) The following command opens the Proxy Host Control Panel of a sample PC named TESTPC at 192.168.1.2:

```
C:\Program Files (x86)\Proxy Networks\Host> phadmin /sTESTPC
```

Note below that the IP address can be specified as well:

```
C:\Program Files (x86)\Proxy Networks\Host> phadmin /s192.168.1.2
```

Note very well: There is no space after the s in /s and the first digit in the IP or letter in the computer name.

This second bonus method applies to PROXY Pro RAS and PROXY Air Dedicated (not P2P) customers only. Assuming you are an administrative user of your PROXY Pro or PROXY Air server, here are the steps to modify a Host's settings.

- 1) Log into your PROXY Pro or PROXY Air instance as an administrative user
- 2) Find the Host whose settings you are looking to view/edit; use the search box at the top as needed
- 3) Right-click the Host and choose Host Settings. You may be prompted for authentication and if so, it's looking for a user that is a member of the Host computer's local administrators group by default
- 4) Upon successful authentication, you'll be able to view and edit each of the Host's settings remotely through the Proxy Web Console

Both of these bonus methods are intended for one-off situations where you need to modify one and only one Host's settings.

We hope you were able to extract the information you were hoping to get from this supplementary document. Please reach out to support@proxynetworks.com for questions or by phone at 1-877-PROXY-US.