FUJI Xerox

Package Aware Print Driver

MS16-087 - KB3170455

Symptom
The new Microsoft Server Patch MS16-087 - KB3170455 requires print driver's to be packaged (Package Aware Printer Driver) in order for the client pc with non –administrator rights to install the print driver files.

Affected products
All drivers are affected, even digitally signed WHQL drivers requires to be Package Aware Printer Driver.

Root Cause
Recently a patch from Microsoft has been rolled out to their OS (Patch#: KB3170455). This patch is part of Microsoft's Security Update to resolve vulnerabilities in their Operating Systems. This security patch resolves Microsoft OS issue if an attacker is able to execute a man-in-the-middle (MiTM) attack on a workstation or a print server.

More details about this security patch from Microsoft, you can read it from this link: Microsoft Bulletin MS16-087.

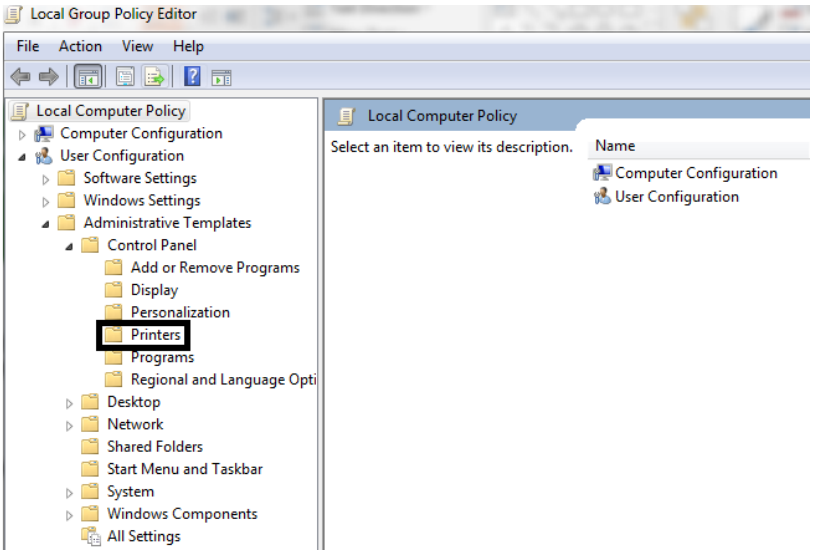
How does it affect us?
When the vulnerability of Microsoft has been addressed through installing the patch KB3170455, this requires the server to:
- Correct how the Windows Print Spooler writes to the file system
- Issuing a warning to users who attempt to install untrusted printer drivers
- Client PC connecting to the server requires Administrator rights to install the drivers

Conclusion
WHQL drivers released from now on, will also be released as "Package Aware Printer Driver". However, there is no schedule (ETA) for the release dates of these drivers.

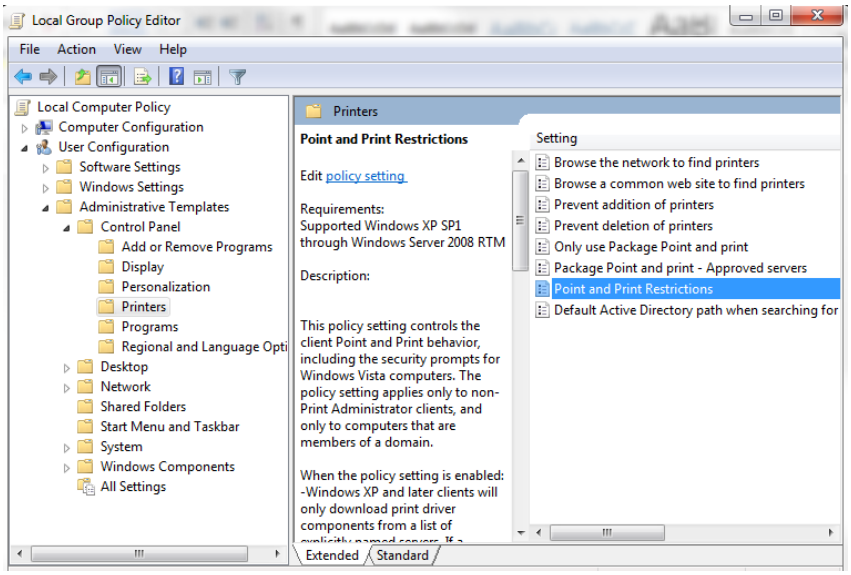
Microsoft Package Aware Driver Workaround
As we cannot avoid this security settings, we advise our customer to do this workaround to make sure that the warning regarding untrusted printer drivers will not appear on client computers connecting to the server.

Procedure on **Client PC**:

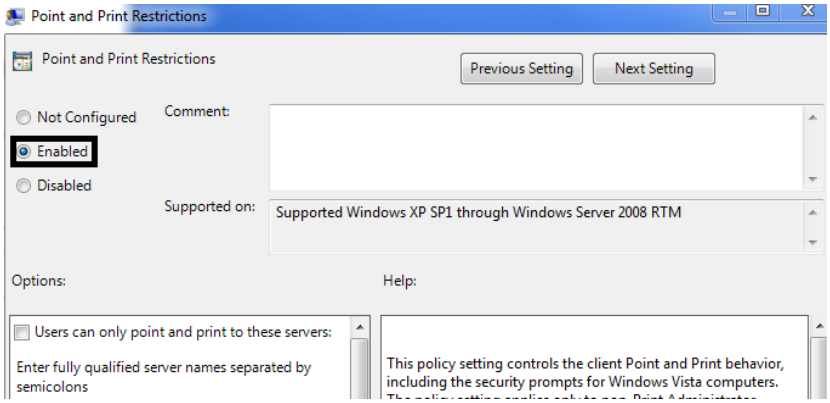
1. Log on as Administrator on the Client PC.
2. Open Command Prompt, type "***gpedit.msc***" and then press [Enter]
3. You will have Local Group Policy Editor screen, go to User Configuration > Administrative Templates > Control Panel > Printers



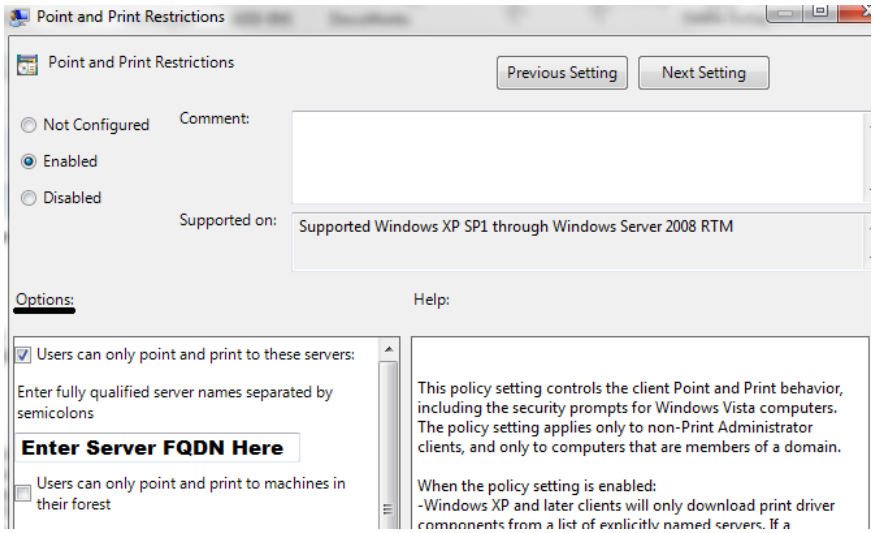
4. Open “Point and Print Restrictions”.



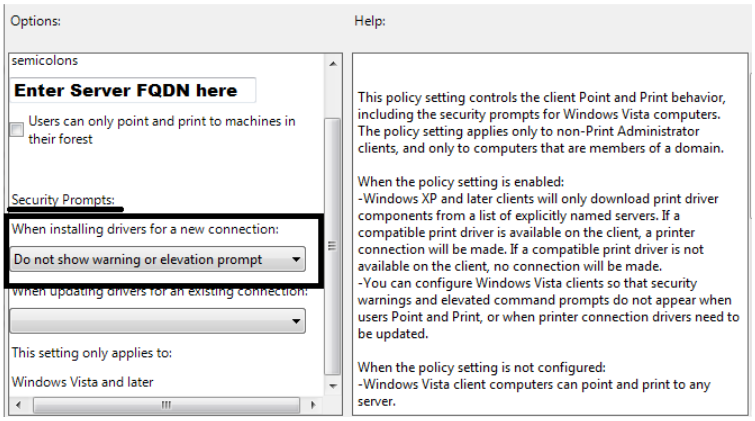
5. Select "Enabled" on "Point and Print Restrictions".



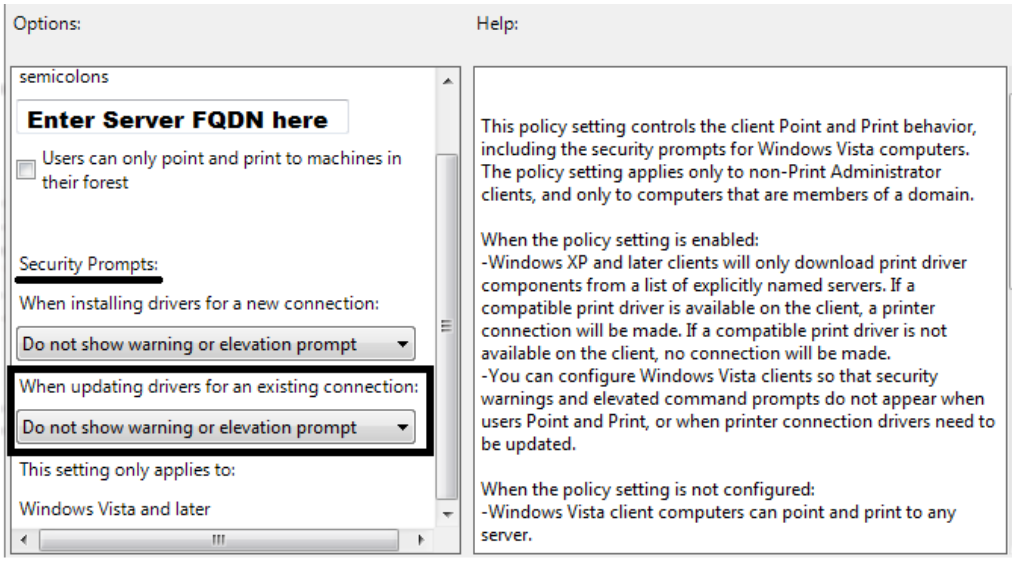
6. On the same group policy editor screen, look for Options; then check the [Users can only point and print to these servers] check box, and enter a server name into the [Enter fully qualified server names separated by semicolons] text box.



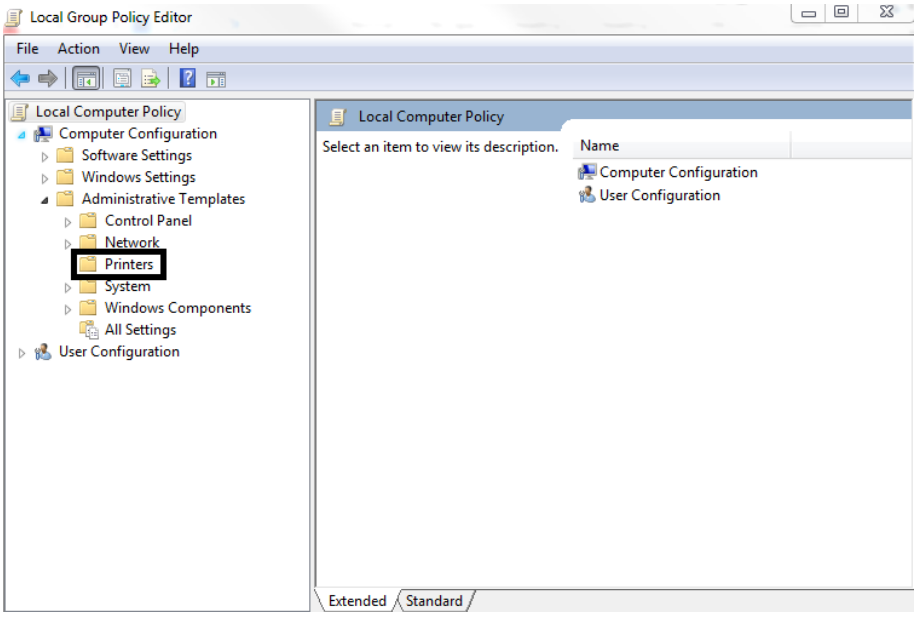
7. Select “Do not show warning or elevation prompt” for the option [When installing drivers for a new connection] selection box under Security Prompts:.



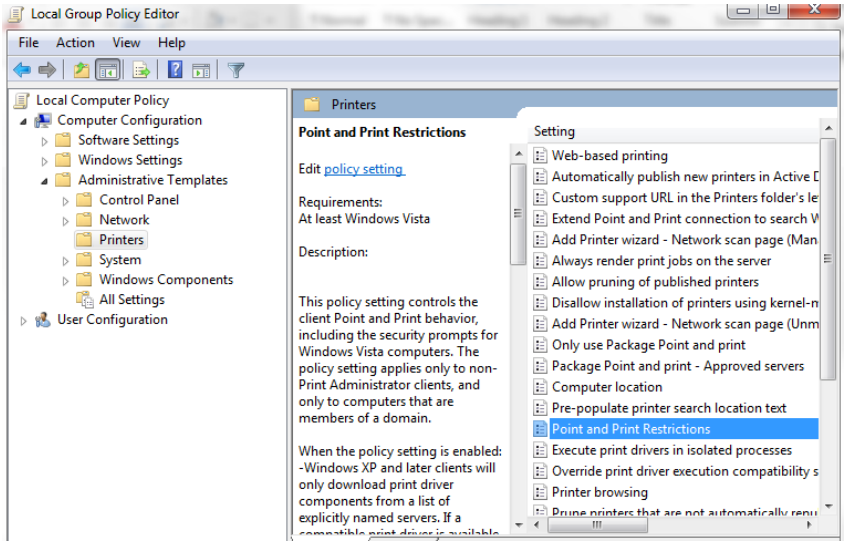
8. Select “Do not show warning or elevation prompt” for the [When updating drivers for an existing connection] selection box under Security Prompts:.



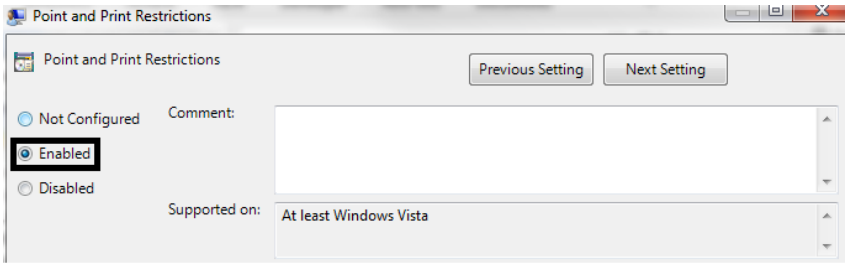
9. Click [OK] and close the “Point and Print Restrictions” dialog box.
10. You are now back to Local Group Policy Editor screen, expand Computer Configuration > Administrative Templates > Printers



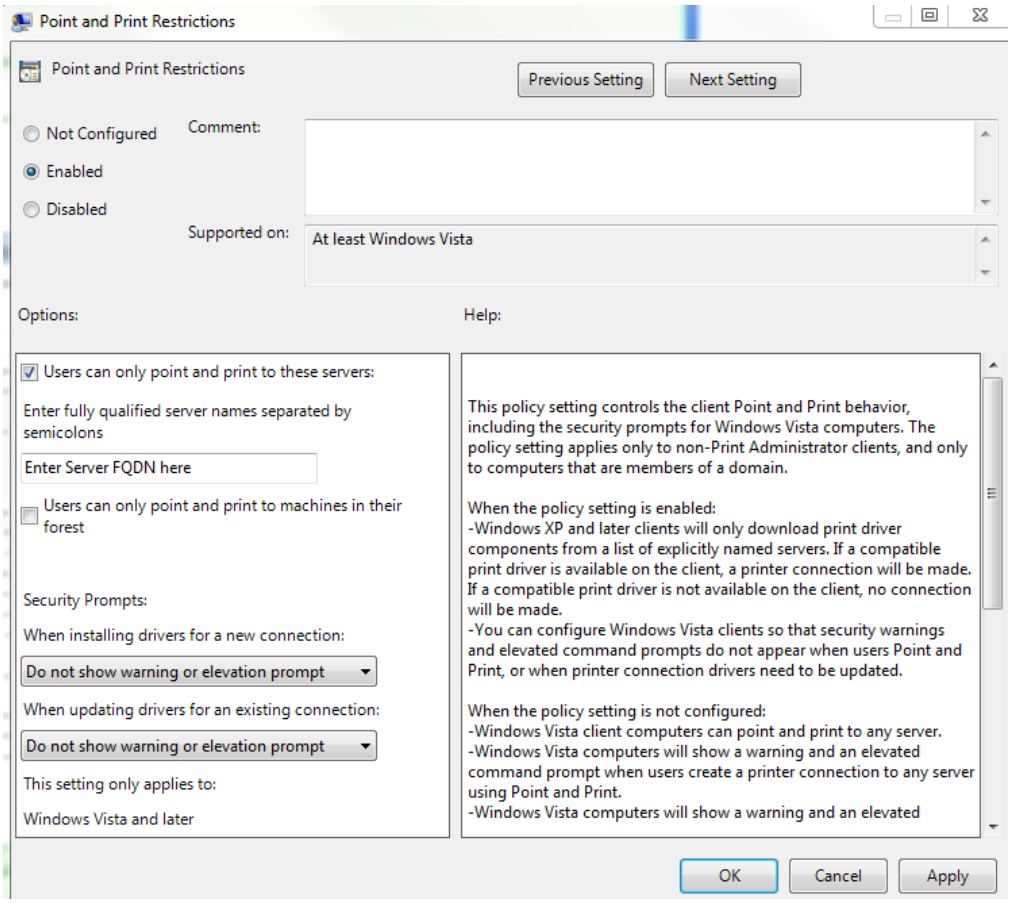
11. Open “Point and Print Restrictions”.



12. Select "Enabled" on "Point and Print Restrictions".



13. On the same group policy editor screen, look for Options; then check the [Users can only point and print to these servers] check box, and enter a server name into the [Enter fully qualified server names separated by semicolons] text box.
14. Select “Do not show warning or elevation prompt” for the option [When installing drivers for a new connection] selection box under Security Prompts:.
15. Select “Do not show warning or elevation prompt” for the [When updating drivers for an existing connection] selection box under Security Prompts:.
16. Click [OK] and close the “Point and Print Restrictions” dialog box.
17. Close Local Group Policy Editor screen.



Notes:
For clients who participate in Active Directory, the above steps of changing Local Group Policy may not work since the Domain Group Policy could overwrite it.

In this case, you have to change the group policy applied to the client using the same procedure mentioned above. However, this should be done using the [Group Policy Management Console (GPMC)] tool on the server, so that the issue can be solved in the same manner without changing Local Group Policy on the client PC.

Since there are both "Computer Configuration" and "User Configuration“ to setup on group policy editor, please make sure that you set up "Point and Print Restrictions” on both.
In order for you to check if a group policy setting has taken effect on the client pc, please use “***rsop.msc***” command on the pc.