

LEXMARK BUSINESS PRODUCTS

Workarounds and Fixes for Windows XP SP2

WHITE PAPER

Version 1.3

Table of Contents

Introduction	1
Workaround Issues	2
General Issues	2
Browser Security Enhancements	2
ActiveX Controls.....	2
Pop-Up Blocker	3
Custom Installer Issues	3
Remote Installation	3
Enhanced Communication Support	4
Peer-to-Peer Bidi.....	4
Job Completion Status	5
Status Window.....	5
MarkVision Professional Issues	6
MarkVision Server	6
MarkVision Professional Client Application	6
MarkVision Professional Web Client.....	7
Desktop Application Issues.....	7
ScanBack Wizard.....	7
Lexmark Document Solutions Suite Issues	8
Server Components.....	8
MFPs.....	8
Server Manager	9
“Thin” LDSS Applications (Portal, Desktop/LDSD Admin, LDSD).....	9
Workflow Composer	10
Print ‘N’ Send and Select ‘N’ Send.....	10
Optra Forms Software Issues	11

Introduction

The Microsoft Windows XP Service Pack 2 presents an impact to specific functions in a portion of Lexmark™ software. This white paper details the known fixes to enable adopters of this service pack to workaround issues uncovered in the field for supported PS&SD software.

With Windows XP Service Pack 2, the Windows Firewall (previously called the "Internet Configuration Firewall") adds multiple security restrictions in the Windows registry, and is enabled by default. Many of the functions described in this White Paper deal with firewall issues, as the new Windows Firewall will prevent many of the Lexmark software components from communicating properly with network-connected devices.

For more information about the new Windows XP Service Pack 2, visit the Microsoft informational Web page:

<http://www.microsoft.com/windowsxp/sp2/default.msp>

Workaround Issues

General Issues

The following are upgrade issues that will affect Lexmark customers when upgrading to Windows XP SP2.

Issue	Resolution
When users upgrade to Windows XP SP2 using the full upgrade CD from a down-level operating system, Lexmark BIDI print paths will be removed.	Reinstall the BIDI Support for Drivers and all of the previously created ports will reappear.
The <i>File and Print Sharing</i> option is disabled by default during upgrade to Windows XP SP2.	Enable the <i>File and Print Sharing</i> option in the Firewall setting of the Windows XP machine. This setting can be found under the <i>Exceptions</i> tab in the Windows Firewall dialog box.

Browser Security Enhancements

Windows XP Service Pack 2 has some new browser security features that may affect customers.

ActiveX Controls

Issue	Resolution
With the Windows XP SP2 Firewall disabled, when the first newly-created Desktop View is launched through the IE 6.0 web browser (using the local LDD server's IP address), the web browser will display a security message which reads as follows: <i>To help protect your security, Internet Explorer stopped this site from installing software on your computer. Click here for options.</i>	From the warning message, click <i>Click here for options</i> and then select <i>Allow this page to install ActiveX controls</i> . This will allow the download of a Java applet to the client PC.

Pop-Up Blocker

Issue	Resolution
<p>With the Windows XP SP2 installed, the IE 6.0 browser is updated with a built in pop-up blocker that is enabled by default. With pop-ups blocked, a user of LDSD (Lexmark Document Solutions Desktop) cannot submit a job to the locally attached all-in-one printer.</p> <p>Other Lexmark web applications may have their pop-up windows blocked by IE.</p>	<p>Add the LDSS Server IP address to the Windows XP SP2 client PC's IE <i>Allowed Sites</i> list. To do this, first start IE on the client PC, then click the <i>Tools</i> menu and select <i>Pop-up Blocker</i> → <i>Pop-up Blocker Settings</i>. Type the LDSS Server IP address and then click <i>Add</i> and <i>Close</i>.</p> <p>Or,</p> <p>To completely turn off pop-up blocking in IE, follow the steps above to select <i>Pop-up Blocker</i> from the <i>Tools</i> menu, and then select <i>Turn Off Pop-up Blocker</i>.</p> <p>Or,</p> <p>After receiving the <i>A pop-up was blocked. To see this pop-up or additional options, click here</i> message, click on the <i>click here</i> text to see a list of options concerning pop-ups. Select either <i>Allow Pop-ups</i> or <i>Turn off Pop-ups</i> from the menu.</p>

Custom Installer Issues

Remote Installation

Issue	Resolution
<p>Remote installation on a Windows XP SP2 machine with the firewall enabled is not possible.</p>	<p>Enable <i>File and Print Sharing</i> option in the Firewall setting of the Windows XP machine. This setting can be found under the <i>Exceptions</i> tab in the Windows Firewall dialog box.</p>
<p>Uninstalling drivers that were installed remotely produces an <i>Open File - Security Warning</i> message in products prior to the X422.</p>	<p>Accept the security warning by clicking <i>Run</i> and continue.</p> 

Enhanced Communication Support

The following are problem areas using Bidi paths.

Peer-to-Peer Bidi

Issue	Resolution
<p>In a peer-to-peer scenario, when the Status Window is launched from a Windows client that is connected to a Windows XP SP2 server, the Status Window crashes with an Imabstat.exe buffer overrun error. This is because the new default security settings do not allow client/server Bidi communication in Windows XP SP2.</p>	<p>Complete all of the following steps:</p> <p><i>For devices using the Enhanced Communication Support:</i></p> <ol style="list-style-type: none">1. A private build of the Enhanced Communication Support will be available from the TSC/PE team.2. The following setting changes should be made on the Windows XP SP2 computer:<ul style="list-style-type: none">▪ Launch DCOMCNFG (<i>Start → Run → DCOMCNFG</i>).▪ Open <i>Component Services → Computers → My Computer</i>.▪ Select <i>My Computer</i> and view its properties.▪ Select the <i>COM Security</i> tab.▪ In <i>Launch and Activation</i> permissions, click <i>Edit Limits</i>.▪ Select <i>Everyone</i> from the <i>Group or Users</i> list. In the <i>Permissions</i> section, allow <i>Remote Activation</i>.<p>http://www.microsoft.com/com/wpaper/dcomfw.asp?SD=GN&LN=EN-US&gssnb=1#firewall</p> <p><i>For all devices:</i></p> <ol style="list-style-type: none">3. Users must allow Remote Procedure Calls (RPC) to penetrate the Windows Firewall for peer-to-peer BIDI to function correctly. Please refer to the following web sites for more detailed support information: http://support.microsoft.com/default.aspx?scid=kb;en-us;154596 <p>NOTE: <i>Enabling a range of ports for RPC communication creates an exposure that reduces the effectiveness of your Windows Firewall.</i></p>

Job Completion Status

Issue	Resolution
<p>Lexmark's Enhanced Communication Support software has a new feature that will let a customer know when a document has printed successfully. When the 'Jobs Stay In Queue' feature is enabled, all jobs sent to the printer will stay in the spooler queue for a (configurable) timeout period. If the computer is rebooted while jobs are still in its queue, those jobs will reprint without informing the user. This is because the Windows XP Firewall blocks all unsolicited UDP traffic.</p>	<p>The following executables should be added to the Windows Firewall exception list to enable the Enhanced Communication Support software:</p> <p>Lexmark - lmabcoms.exe IBM - iiabcoms.exe OEM - gnabcoms.exe (Default path: C:\Windows\System32)</p>

Status Window

Issue	Resolution
<p>With the Status Window open, the Windows Firewall will allow asynchronous responses (device status alerts) for up to 90 seconds after initial registration. After that time, however, the Windows Firewall will block all unsolicited alerts from the printer.</p>	<p>For any printer using a Lexmark Network Port, the following executable should be added to the Windows Firewall exception list to enable the BIDI Support for Drivers software:</p> <p>Lexmark - lexbces.exe (Default path: C:\Windows\System32)</p> <p>For any printer using a Lexmark Enhanced TCP/IP Port, the following executable should be added to the Windows Firewall exception list to enable the Enhanced Communication Support software:</p> <p>Lexmark - lmabcoms.exe IBM - iiabcoms.exe OEM - gnabcoms.exe (Default path: C:\Windows\System32)</p>

MarkVision Professional Issues

Issue	Resolution
<p>Windows Firewall prevents MarkVision™ Server software from communicating properly with network connected devices and prevents all MarkVision Professional clients from communicating properly with local or remote MarkVision Server installations.</p>	<p>MVP users whom have not properly configured their installations will receive a warning message when starting their MarkVision Professional client application.</p>  <p>Select <i>Unblock this program</i> and complete the setup/configuration instructions in the <i>MarkVision Professional Client Application</i> section of this document.</p>

MarkVision Server

Issue	Resolution
<p>The server cannot communicate properly with network-connected devices and will not broadcast its presence on the network. If a user attempts to connect to these MarkVision Server instances, they will receive the following error message: <i>Error connecting <server address>, Connection Refused.</i></p>	<p>The following executables should be added to the Windows Firewall exception list to enable the MarkVision Server software:</p> <ul style="list-style-type: none"> LexMvService.exe (Default path: C:\Windows\System32) LexWebService.exe (Default path: C:\Windows\System32) java.exe (Default path: C:\Program Files\Lexmark\MarkVision Server\jre\bin)

MarkVision Professional Client Application

Issue	Resolution
<p>If a user attempts to connect using improperly configured installations of MarkVision Professional clients, they will receive the following error message: <i>Error connecting <server address>, Connection Refused.</i></p>	<p>The following executables should be added to the Windows Firewall exception list to enable the MarkVision Professional client software:</p> <ul style="list-style-type: none"> MarkVision.exe (Default path: C:\Program Files\Lexmark\MarkVision Professional) java.exe (Default path: C:\Program Files\Lexmark\MarkVision Professional\jre\bin)

MarkVision Professional Web Client

After configuring the MarkVision Server installation (see the *MarkVision Server* section of this document), all MarkVision Professional Web clients will function properly.

Desktop Application Issues

ScanBack Wizard

Issue	Resolution
<p>Since the Windows Firewall utility is turned on by default in Windows XP SP2, users will encounter a <i>Security Alert</i> warning from this utility when a profile is set up in the ScanBack™ application.</p>	<p>Before the profile can be submitted to the MFP device, the user must select the <i>Unblock this program</i> option in order to run the profile from the MFP operator panel.</p>  <p>If the user closes the <i>Security Alert</i> dialog window without first selecting the first option, the profile will not be submitted to the MFP device.</p>

Lexmark Document Solutions Suite Issues

Windows Firewall prevents many LDSS components from communicating properly with the LDSS Server and network-connected devices. No code fixes are required, however the following workarounds need to be performed.

Server Components

The following executables should be added to the Windows Firewall exception list on an LDSS Server to enable the LDSS software:

sbserver.exe

(Default path: C:\Program Files\Lexmark\Document Solutions\Server)

sblisten.exe

(Default path: C:\Program Files\Lexmark\Document Solutions\Server)

tomcat.exe

(Default path: C:\Program Files\Lexmark\Document Solutions\Services\tomcat\bin)

java.exe

(Default path: C:\Program Files\Lexmark\Document Solutions\Services\jre\bin)

MFPs

MFP (Multi-Function Printer) devices will not function properly with an LDSS Server without adding LDSS Server files to the Windows Firewall exception list on the server. Listed below are some associated symptoms:

Issue	Resolution
With the Windows XP SP2 Firewall utility enabled on an LDSS Server, if a profile is run from a MFP device, the image or document will scan but the confirmation page for each profile will not be printed. If the profile involves saving the file to a directory, this action fails to work as well.	After adding the server components specified in the <i>Server Components</i> section to the Windows Firewall exceptions list on the LDSS Server, MFPs should function properly with an LDSS Server.
With the Windows XP SP2 Firewall utility enabled on an LDSS Server, if a dynamic prompting profile is run from a MFP device operator panel, the profile will hang and finally deliver an error message that states that the profile can not connect to the profile server.	After adding the server components specified in the <i>Server Components</i> section to the Windows Firewall exceptions list on the LDSS Server, MFPs should function properly with an LDSS Server.

Server Manager

The Server Manager application will not function properly with an LDSS Server without adding LDSS Server files to the Windows Firewall exception list on the server. Listed below are some associated symptoms:

Issue	Resolution
<p>After installing Server Manager on a PC that is not the LDSS Server PC, with the LDSS Server located on a Windows XP SP2 system, Server Manager cannot connect to the LDSS Server. While trying to add the LDSS Server to Server Manager, an error message, (<i>Unable to communicate with server xxx.xxx.xxx.xxx</i>) may be displayed.</p> <p>This kind of error can occur with an existing Server Manager when you try to connect Server Manager back to an LDSS Server that has been recently updated to Windows XP SP2.</p>	<p>After adding the server components specified in the <i>Server Components</i> section to the Windows Firewall exceptions list on the LDSS Server, Server Manager should function properly with an LDSS Server.</p> <p>It did not appear that the Server Manager application (<i>.\Program Files\Lexmark\Document Solutions\Server Manager\admin.exe</i>) needed to be added to the Windows Firewall exceptions list of the client Windows XP SP2 PC(s) on which it was installed.</p>

“Thin” LDSS Applications (Portal, Desktop/LDSD Admin, LDSD)

Issue	Resolution
<p>With the Windows XP SP2 Firewall enabled on an LDSS Server, the Desktop (LDSD) Admin, LDSD (Lexmark Document Solutions Desktop) and Portal Desktop applications on a client PC are unable to connect to the LDSS Server.</p>	<p>After adding the tomcat.exe file specified in the <i>Server Components</i> section to the Windows Firewall exceptions list on the LDSS Server, these “thin” LDSS applications should function properly.</p>
<p>With Windows XP SP2 installed on a PC, Internet Explorer (IE) is updated. The IE updates block browser pop-ups and turn off the ability for web applications to download signed applications to the PC.</p>	<p>Please read the <i>Browser Security Enhancements</i> section in this document for these resolutions.</p>

Workflow Composer

The Server Manager application will not function properly with an LDSS Server without adding LDSS Server files to the Windows Firewall exception list on the server. Listed below are some associated symptoms:

Issue	Resolution
After installing Workflow Composer on a PC that is not the LDSS Server, with the LDSS Server on a Windows XP SP2 system, Workflow Composer can have problems uploading scripts to the LDSS Server.	After adding the server components specified in the <i>Server Components</i> section of this document to the Windows Firewall exceptions list on the LDSS Server, Workflow Composer should function properly with an LDSS Server. It did not appear that the Workflow Composer application (.\Program Files\Lexmark\Document Solutions\Workflow Composer\WorkflowComposer.exe) needed to be added to the Windows Firewall exceptions list of the client Windows XP SP2 PC(s) on which it was installed.

Print 'N' Send and Select 'N' Send

Print 'N' Send and Select 'N' Send will not function properly with an LDSS Server without adding LDSS Server files to the Windows Firewall exception list on the server and some Print 'N' Send and Select 'N' Send files to the Windows Firewall exception list on client PCs. Listed below are some associated symptoms:

Issue	Resolution
With the Windows XP SP2 Firewall utility enabled on an LDSS Server, with Print 'N' Send installed on a separate client PC, the Print 'N' Send Add Port Wizard on the client PC will display an error message saying <i>Unable to connect to the server. Verify the server is online and try again.</i> This occurs when the wizard reaches the <i>Getting profiles list. . .</i> screen. This error can also occur when adding a Lexmark Document Server Port from the <i>Printers</i> folder.	Add the server components specified in the <i>Server Components</i> section of this document to the Windows Firewall exceptions list on the LDSS Server before installing Print 'N' Send or Select 'N' Send on the client PC.

<p>With the Windows XP SP2 Firewall utility enabled on an LDSS Server and the client PC, existing installations of Print 'N' Send and Select 'N' Send on other client PCs may start hanging, popping up server connection error messages and having other problems.</p>	<p>To completely get Print 'N' Send and Select 'N' Send working between an LDSS Server PC and client PCs with XP and SP2, and the Windows Firewall enabled on all of these PCs, complete the following steps:</p> <ol style="list-style-type: none"> 1. Add the server components specified in the <i>Server Components</i> section of this document to the Windows Firewall exceptions list on the LDSS Server PC. 2. Add the following file to the Windows Firewall exceptions list on the client PCs: ddcfwait.exe (Default path: C:\windows\system32)
<p>Users will see the following Windows Firewall Security Alert message in the Select 'N' Send application on a client PC when submitting a job to the server:</p> 	<p>See the resolution above in this table.</p>

Optra Forms Software Issues

The following executables should be added to the Windows Firewall exception list to enable the Optra Forms software:

Optra Forms Manager:

OF-Manager.exe

(Default path: C:\Program Files\Lexmark\Optra_Forms)

Optra Forms Director:

OFDirectorService.exe

(Default path: C:\Program Files\Lexmark\Optra Forms Director)

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