Procedure to resolve CEPS Conversion JTP Slowdown on PE4600 Secondary Server

1. INTRODUCTION

There is a potential slowdown problem with the Prinergy 2.1 CEPS JTP running on PE4600 secondary servers whose W2K Server OS was loaded off the revision F of the PE4600 Server ghost image. The workaround procedure is provided in this note for users to perform to resolve the problem.

2. POTENTIAL AFFECTED SYSTEMS

The CEPS JTP slowdown only affects Prinergy 2.1 systems, and only when the CEPS JTP runs on a Dell PowerEdge 4600 secondary server with the job home on another server. If the CEPS JTP is installed and running on the Prinergy Primary server, we believe its performance is not affected.

The CEPS conversion JTP slowdown problem mentioned above is known to occur with secondary servers whose W2K Server OS was loaded off the revision F (CD P/N: 21-0150B-F) of the PE4600 Server ghost image (the OS is loaded with W2K Service Pack 2). The problem does not occur with subsequent versions of the ghost image i.e. revision G and later.

3. RECOMMENDED PROCEDURE TO RESOLVE THE PROBLEM

WARNING: The procedure steps described in this section is to be performed on the Prinergy Secondary Servers ONLY. Performing the steps below on the Prinergy Primary server can cause problem, which can lead to the system becoming non-operational. If rebuilding of a Prinergy Primary Server is a MUST do, then re-hosting the system with revision G (or later) server ghost image is highly recommended.

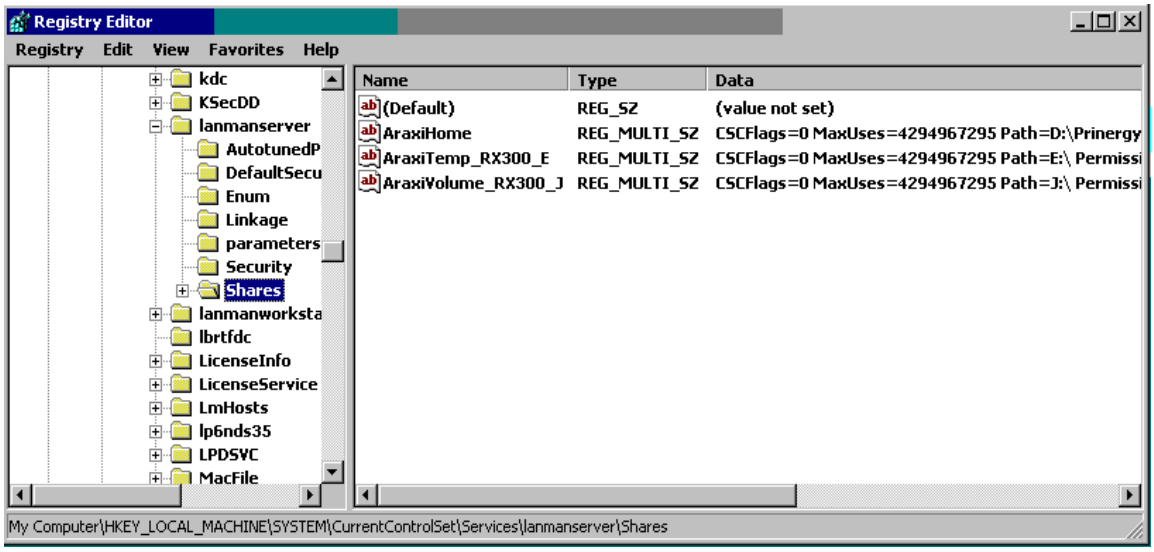
3.1 Recording Server Network Settings

3.1.1 Recording Prinergy Default Shares

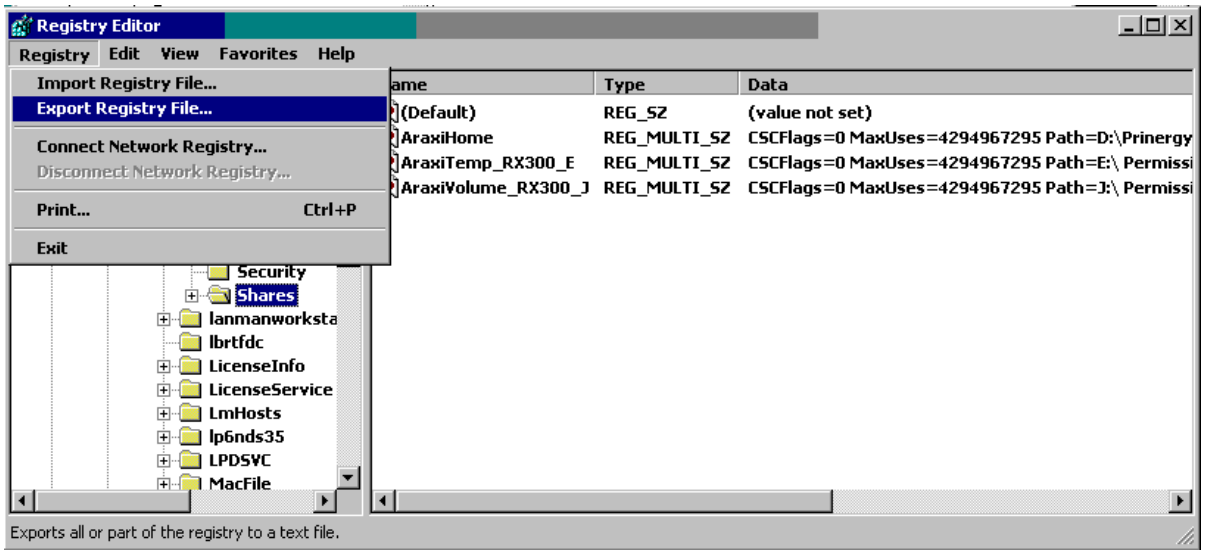
Record the Prinergy default shares using W2K Registry Editor tool (REGEDIT).

- Click **Start > Run…**, type "**`Regedit`**", and then press <**Enter**>

- Navigate to the Registry tree of **HKLM/System/CurrentControlSet/Services/LanmanServer/Shares** as seen in picture below:



- Select **Registry > Export Registry File…** menu option to save the Prinergy share tree to a file called **PrinergyShare** in **D:\Temp** directory.



3.1.2 Recording Hummingbird NFS Client Software Configuration Settings

If Hummingbird Maestro NFS client software is not installed, skip this section.

Refer to the **Unix Connectivity to Prinergy 2.0 Concepts and Configuration** guide (Document No. 72-3529A-D) for details on important configuration settings, which need to be recorded.

3.1.3 Recording Printer Port(s)

Print and fill in this form for each printer (if installed), ignoring all Acrobat printers.

1. Select **Start**>**Settings**>**Printers.** Right-click on a **Printer** name and select the **Properties**>**General** tab:			
Printer name:		Is **Set as Default** checked? Y/N	
Item	**Location**	**Comment**	**Driver**
Value			
	Select **Printing Preferences…**		
Item	**Layout** *tab*	**Paper/Quality** *tab*	**Job Retention** *tab*
Value	**Orientation:** **Print on Both Sides (Duplex):** **Page Order:**	**Tray Selection:** **Paper Source:** **Media:**	**Job Retention Mode:** • **Off** • **Proof and Hold** • **Private Job**
	<Advanced…>	**<Advanced…>**	
	Select the **Ports** tab:		
Item	**Port** Selected one only.	**Enable Spooling** *(unchk)*	**Bidirection Support** *(unchk)*
Value			
	Select the **Sharing** tab:		
Item	**Shared.** If selected, list name.	Click **Additional Drivers.** List any that show installed.	
Value			
Value			
	Select the **Security** tab, click on **Advanced** then **Permissions**:tab		
Name	**(default value)**	**Current setting**	
Administrator	Full Control		
Creator Owner	Manage Documents		
Everyone	Print		
Power Users	Full Control		
	Click on **Auditing**.tab, (Note: default is **nothing audited**).		
Item	**Name**	**Events to audit**	
Value			
	Select the **Device Settings** tab. List any items that show ‘installed’ below. Use the spare space for anything not listed.		
Item		**Value**	
Available Postscript Memory			
Tray Assignment (Tray 1)			
Tray Assignment (Tray 2)			
Duplex Unit			

	TCP/IP Printer ports Record the IP address and PrinterPort name of each port below:
IP Address	**PrinterPort**
	Mac Printing ports These AppleTalk Printers show up as **X:Y** (eg. Willingdon:MacPrinter) where **X=Zone** and **Y=PrinterPort**. List all that appear
Zone	**PrinterPort**
	Network Printer Server ports these can only be found when logged in as the standard user. If not already done, log out and log back in as a standard user. (Select **Start->Settings->Printers**) Look for any printers that are labeled X on Y (eg. **MechPC on Perform2**) and document them **X=PrinterShare**, **Y=Server**
Printer Share	**Server**

3.1.4 Recording Network Configuration Settings

Fill out this form.

1. Right-click **My Network Places** and select **Properties**, then double-click **Local Area Connection** option and select **Properties**

NIC	Adapter Driver	Adapter Number [x]	Speed	Autodetect
1st				

O – Optional, R – Required, D – Loaded by Default

Installed Service	Protocol	Service	Installed	Enabled
NetBEUI Protocol	O, D			
Internet Protocol TCP/IP	R, D			
Client for Microsoft Networks		R, D		
File and Printer Sharing for MS NW		R, D		
Routing & Remote Access Service		O, D		
AppleTalk Protocol		R, D		
SNMP Service		O, D		

Select **Apple Talk Protocol** and then select **Properties**.

Item	Value
Adapter	
Zone	
Enable Routing	

Run the command "**IPCONFIG /ALL > backup.txt"** from DOS Window to save IP Configuration to backup.txt file.

Item	Value
Host Name	
DNS Server	
IP Routing Enabled	

NIC Specific Settings from Adapter:

NIC	DHCP Enabled	IP Address	Default Gateway
1st			

Also:

NIC	Primary WINS	Secondary WINS
1st		

3.2 Removing Server Network Components

Once all the custom Network Configuration settings are recorded, start removing the following Network components:

3.2.1 Removing Hummingbird NFS Client Software (If installed)

If Hummingbird Maestro NFS client software is not installed, skip this section.

Refer to the **Unix Connectivity to Prinergy 2.0 Concepts and Configuration** guide (Document No. 72-3529A-D) for details on un-installing the software.

3.2.2 Removing Windows Optional Network Components

- Stop the Prinergy **ARAXI** service if it is running
- Right-click **My Network Places** and select **Properties**, click **Advanced->Optional Networking Components…** option
  - Uncheck **Management and Monitoring Tools**
  - Uncheck **Networking Services** (Note that this service was never installed by default)
  - Uncheck **Other Network File and Print Services,** click <**Next**> and wait for window to disappear

3.2.3 Removing Network Properties

- Double-click **Local Area Connection** option and select **Properties**, and then select to removing the following:
  - **Files and Printer Sharing for Microsoft Networks**, and then click <**Uninstall…>**
  - **Clients for Microsoft Networks**, and then click <**Uninstall…>**
  - Reboot the server as prompted, logon the system and go back into the **Properties** window of the **Local Area Connection** option and remove the rest of the network components.
  - **NetBEUI Protocol** and click <**Uninstall…>, <Yes>** to confirm (Wait for it to complete uninstalling the component, if the hour glass stays longer than 5 minutes, you can safely press the Power/Reset button to reboot the server)
  - **Apple Talk Protocol**
  - **Internet Protocol (TCP/IP),** click <**Uninstall…>,** select <**No>** to the "**Install at least one of the …"** prompt and reboot the server.

3.3 Re-Installing Server Network Components

Once the server is booted, log on to the Administrator account, and proceed to start installing all the network components removed in section 3.2 above.

1. Click **Start > Settings > Control Panel > Add/Remove Programs** from the task bar, then select "**Add/Remove Window Components"**

   - Select **Management and Monitoring Tools**, uncheck **Internet Information Services** and click <**Yes**> to "**The following components…**" prompt to accept the option to remove, then click <**Details>** to select the following sub-components:
     - **Network Monitor Tools**
     - **Simple Network Management Protocol** and click <**OK>**
   - Select **Other Network File and Print Services**, and then click <**Details**> to select the following sub-components:
     - **File Services for Macintosh**
     - **Print Services for Macintosh**
     - **Print Services for Unix** and click <**OK>, <Next>**, **<Next>**, insert the Windows 2000 Service Pack 3 CD into drive if prompted, and click <**OK**> to continue file copying
   - Click <**OK>** to the message about SNMP service not started up in time (i.e. ignore the message at this point, it will recover after a system reboot)
   - Click <**Finish>, <Yes>** to restart the system.

2. Log onto Administrator account upon system boot up. Click <**OK>** to ignore the "**Service Control Manager**" warning message at this point, it'll recover after a system reboot

3. Right-click **My Network Places** and select **Properties,** double-click the **Local Area Connection** option and select <**Properties**>

4. Click <**Install…>**, select (highlight) "**Service**" component and click <**Add…>**

5. Select the **File and Printer Sharing for Microsoft Networks** and click **<OK>** to reinstall the service

6. Highlight the **File and Printer Sharing for Microsoft Networks** component from the list, and then click the <**Properties>** button

7. On the **Server Optimization** tab, select **Maximize data throughput for Network applications**, and then click <**OK>**

8. Select **Internet Protocol (TCP/IP)**, and then select **Properties**. On the **General** tab, select **Advanced**

9. Select the **WINS** tab, uncheck **Enable LMHOSTS lookup**, select **Enable NetBIOS over TCP/IP** and click <**OK>**

10. In the **General** tab, select <**OK>** again, and then click <**Next>**

11. Click <**Install…>**, select (highlight) "**Protocol**" component and click <**Add…>** start adding **AppleTalk** and **NetBEUI** protocols

12. Uncheck "**NetBEUI Protocol"** from the installed "**Network Components**" list, check the "**Show icon in taskbar when connected**" option and click <**Close>, <Close**>

13. From the menu bar, select the **Advanced > Advanced Settings…** option

14. In the "**Binding for Local Area Connection**" field, select the "**Internet Protocol (TCP/IP)**" item and click the <**Up Arrow**> button to move the TCP/IP protocol to the top of the network binding list for both "**File and Printer Sharing for Microsoft Network**" & "**Client for Microsoft Networks**" services and click <**OK**> to complete the Network Component reinstallation.

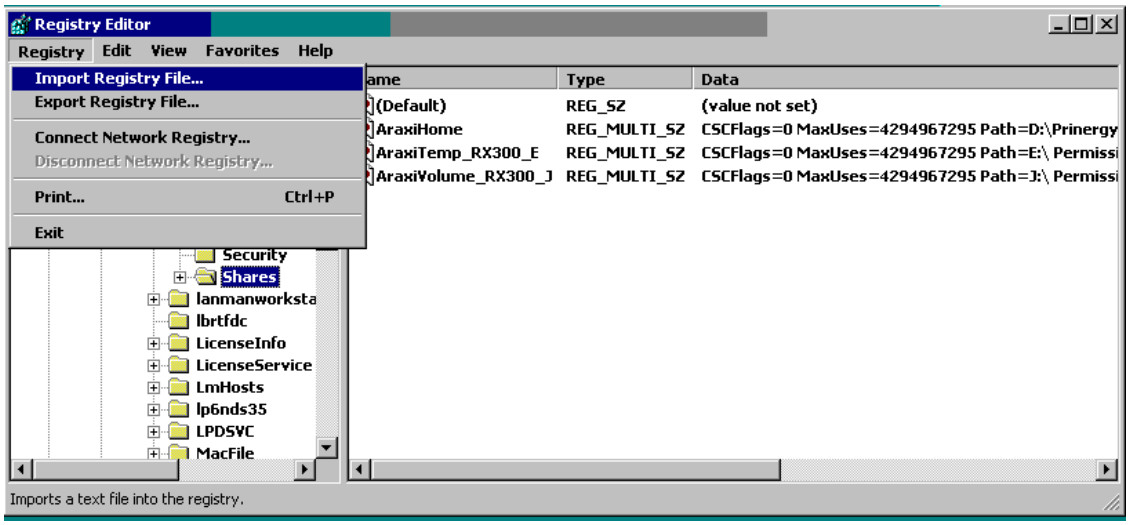
15. Verify the network binding sequence in the registry keys of **HKLM/System/CurrentControlSet/Services/LanmanServer/Linkage** and **HKLM/System/CurrentControlSet/Services/LanmanWorkstation/Linkage**. The **Device\NetbiosSmb** value must be listed as the last item in the list. Move it to the last position if necessary.

16. Remove the CD and reboot the server.

17. Reinstall Hummingbird NFS Client Software if it was removed in section 3.2. Refer to the **Unix Connectivity to Prinergy 2.0 Concepts and Configuration** guide (Document No. 72-3529A-D) for details on installing software.

18. Restore the custom Network/Printer configuration settings recorded in section 3.1.

19. Restore the Prinergy Share registry tree exported earlier by navigating down the registry tree and select the **HKLM/System/CurrentControlSet/Services/LanmanServer/Shares** key and select **Registry > Import Registry File…** menu option, (then select **D:\Temp\PrinergyShare** file) as seen in picture below. Reboot the server when done.



20. Start a Prinergy test run to ensure Prinergy functioning as normal. Specifically, run a job with CEPS conversion running on this secondary server.