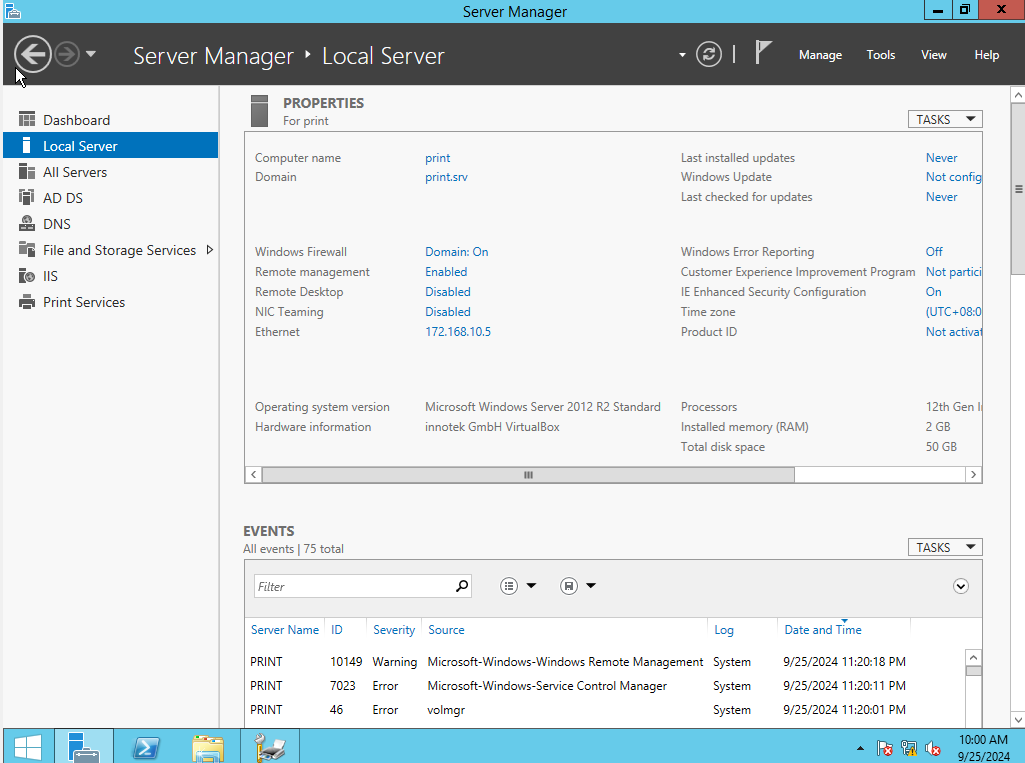
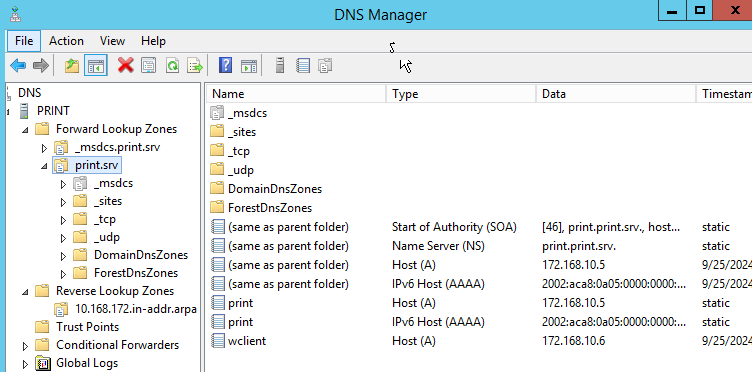
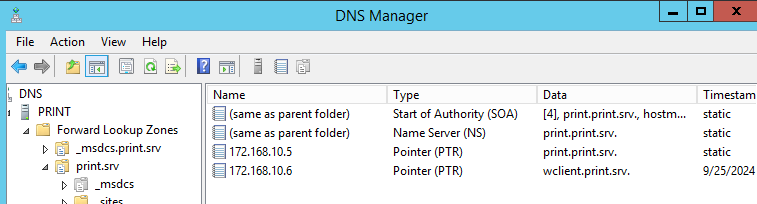
|  |  |  |
| --- | --- | --- |
| SCHOOL OF INFORMATION AND TECHNOLOGY | | |
| NAME: Dale Matthew R. Boquiren | DATE PERFORMED: 09/25/2024 | /50 |
| Section: IDC1 | DATE SUBMITTED: 10/02/2024 |

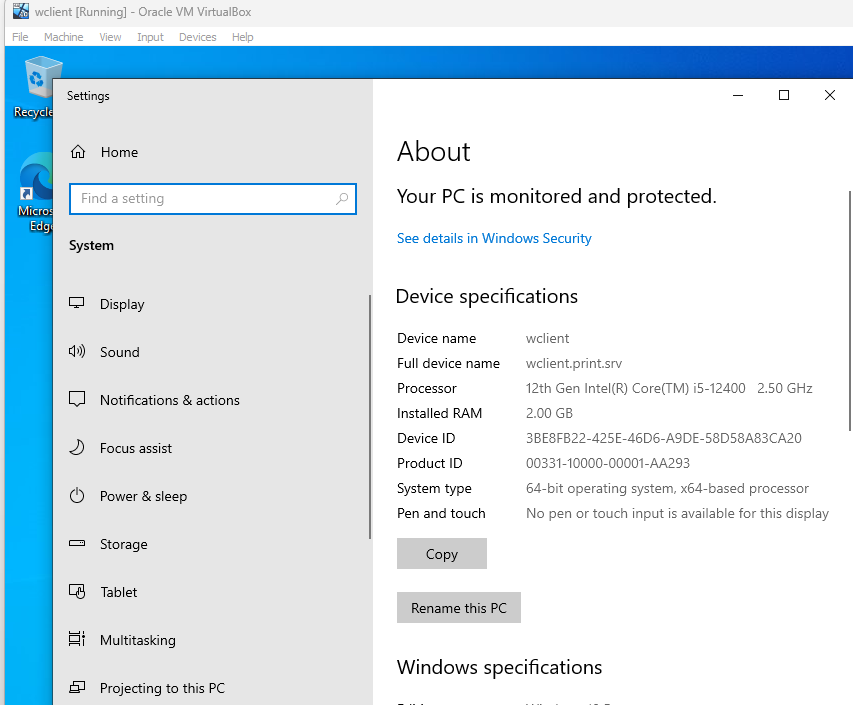
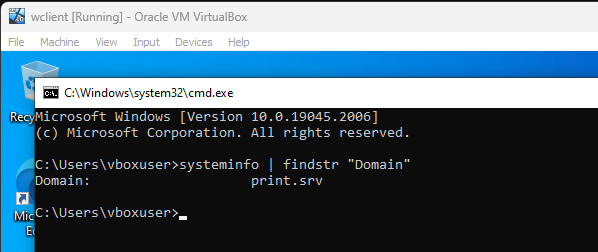
# SYSADM1 – Monitoring Print Services in Windows Server 2019

# Requirement:

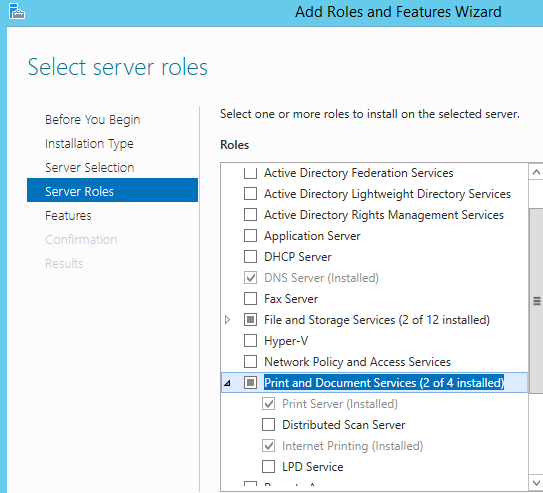
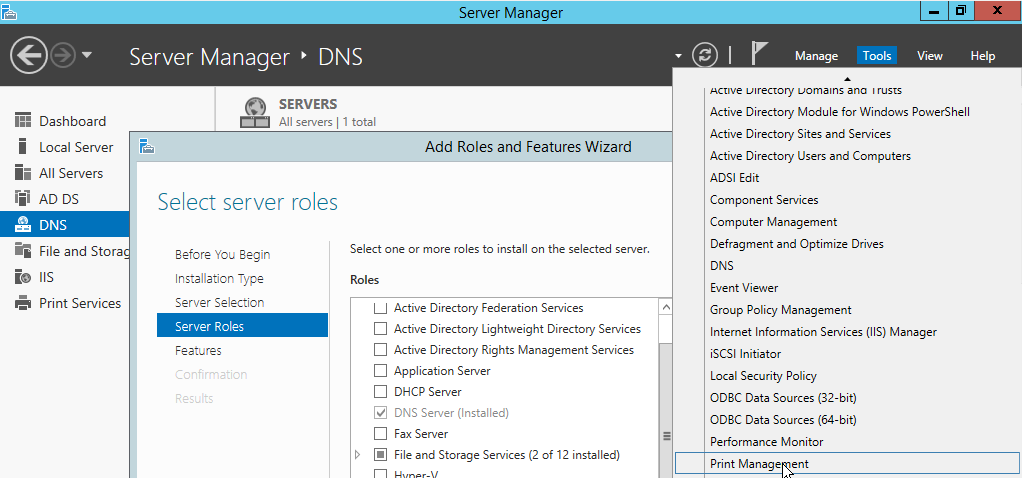
* A virtual machine running Linux and Windows OS

Part 1: Setting Up Print Services

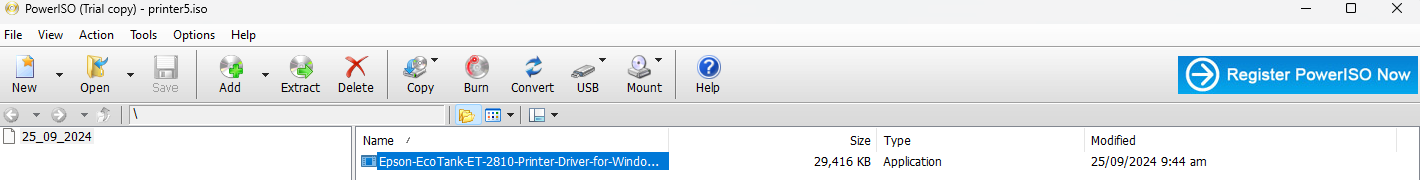
1. Install and configure **print.srv** domain   
     
2. Connect one client to the recently created domain

1. Install Print Services Role:

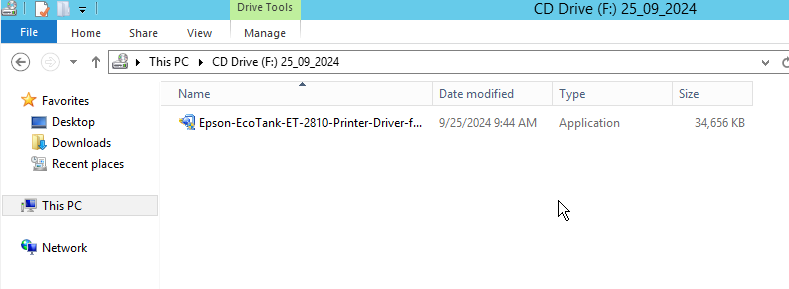
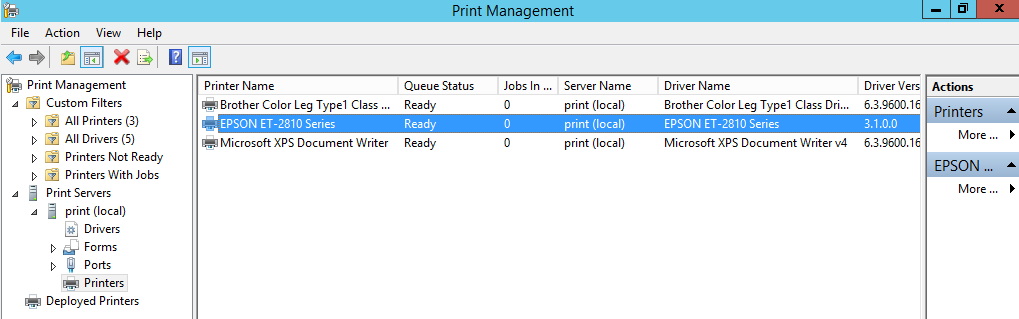
1. Search the internet for any printer installer and convert it to iso

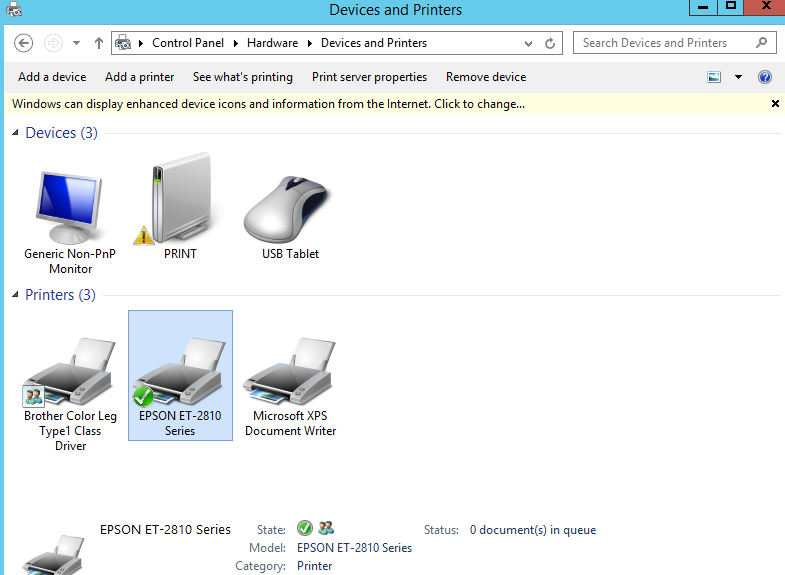


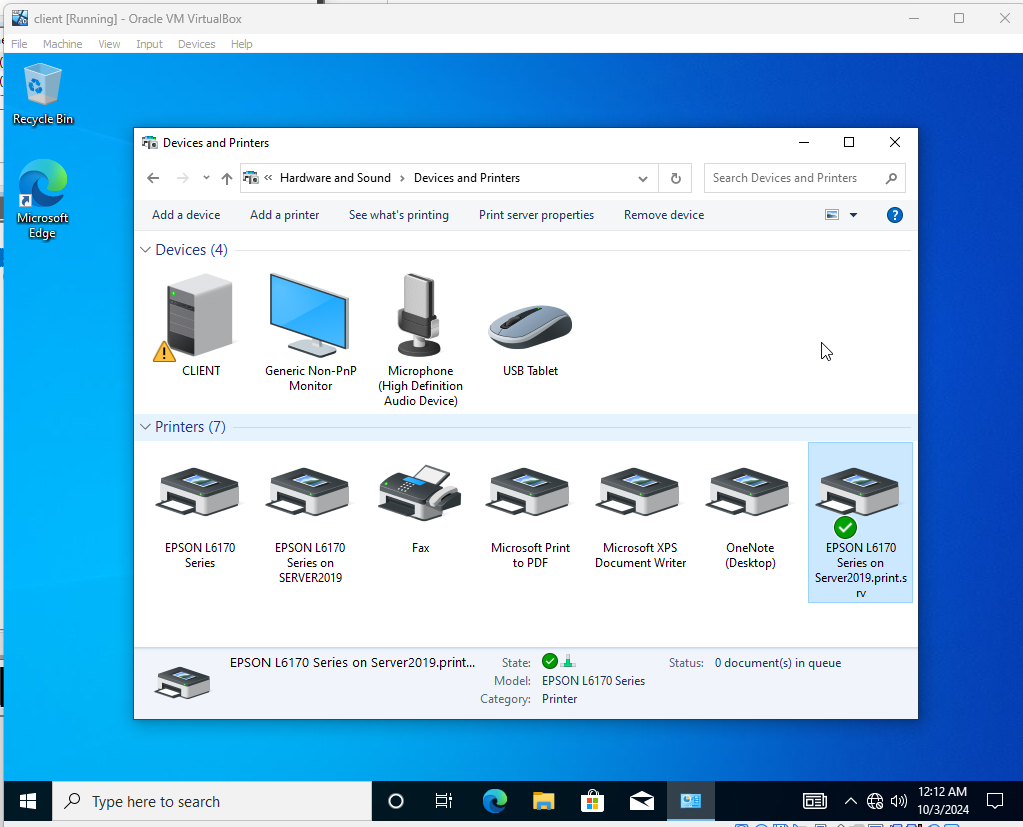
CONVERTED INTO ISO:  


1. Install and deploy it as network printer

Printer Install and deployed:

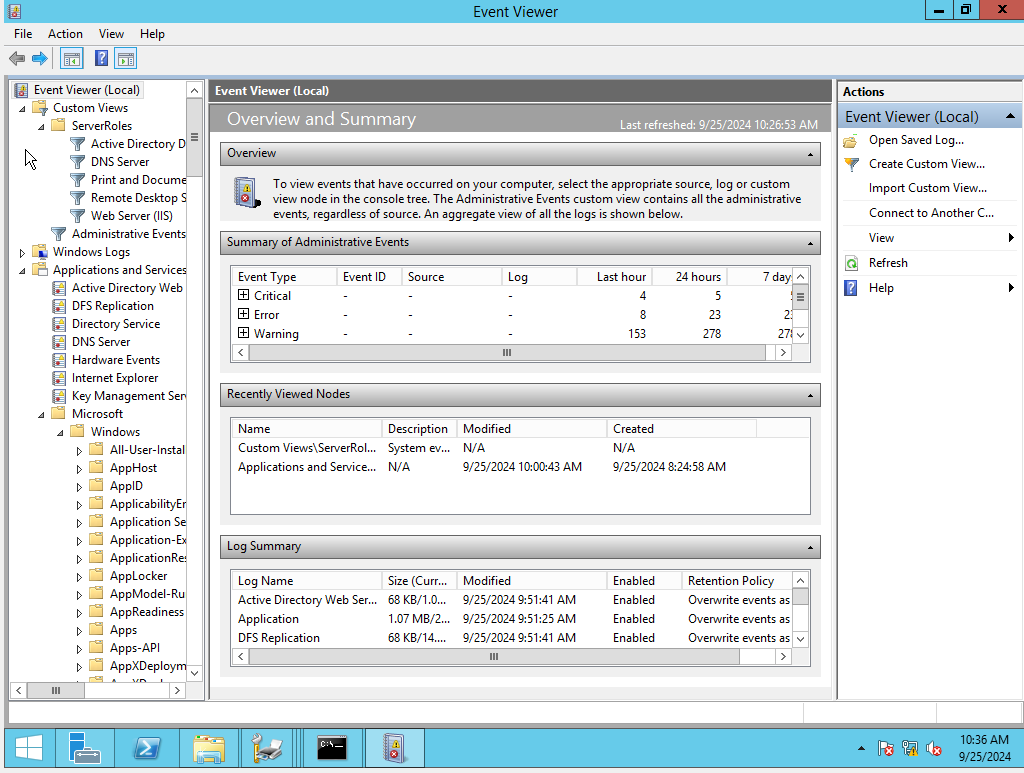
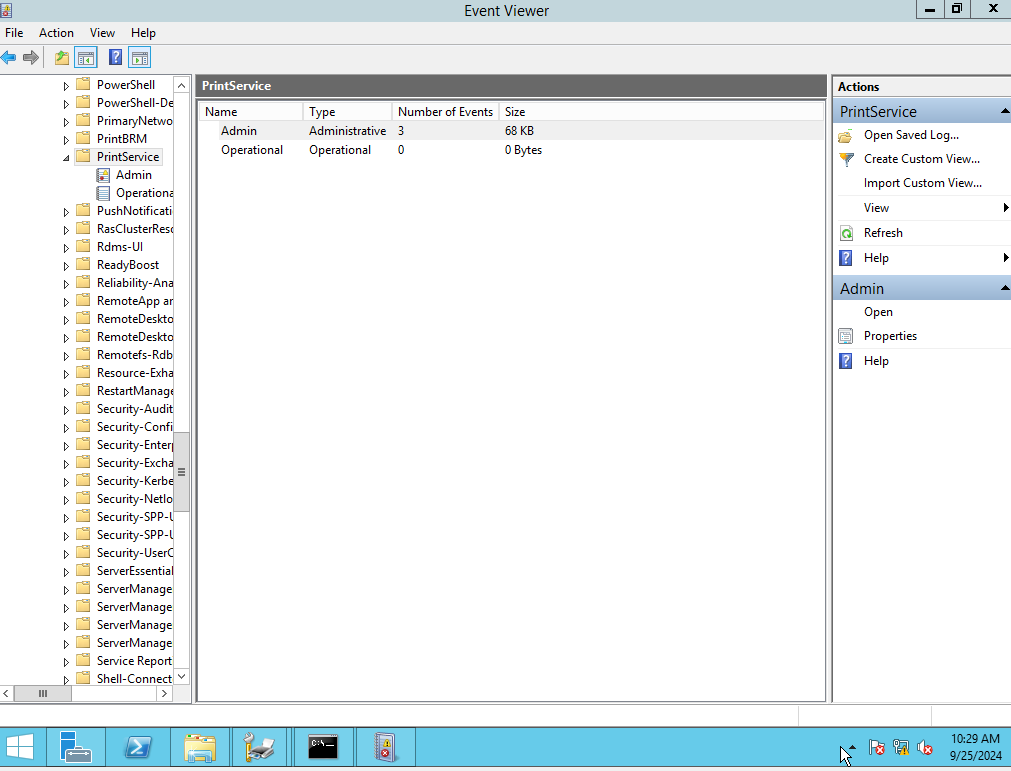
  


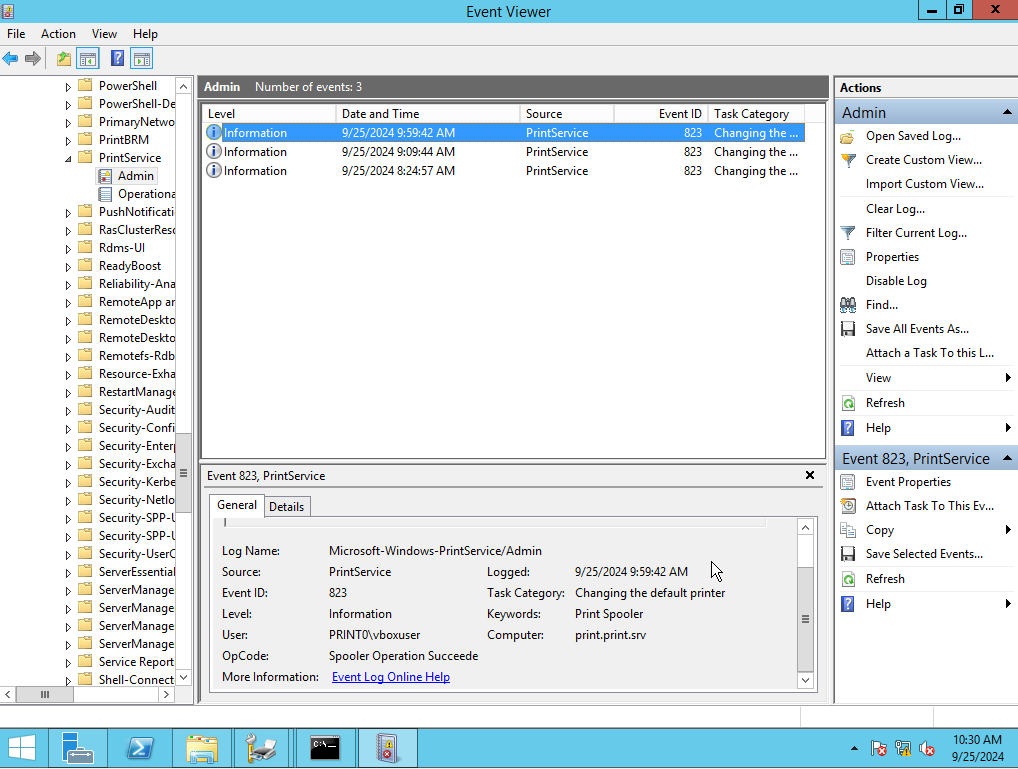
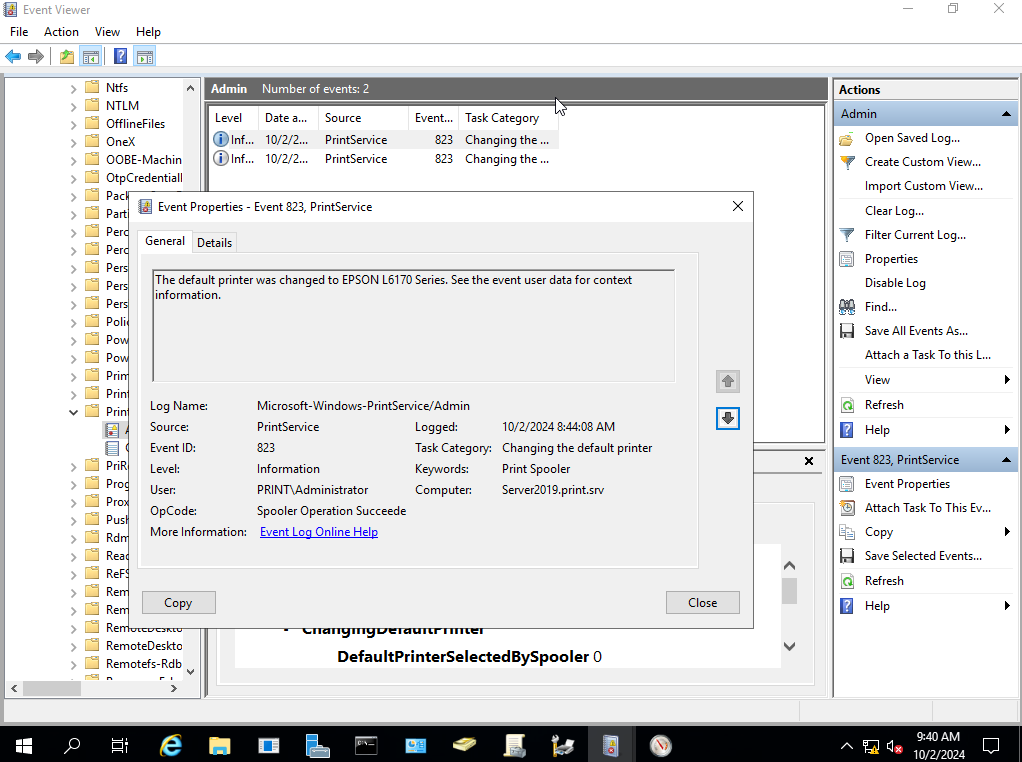


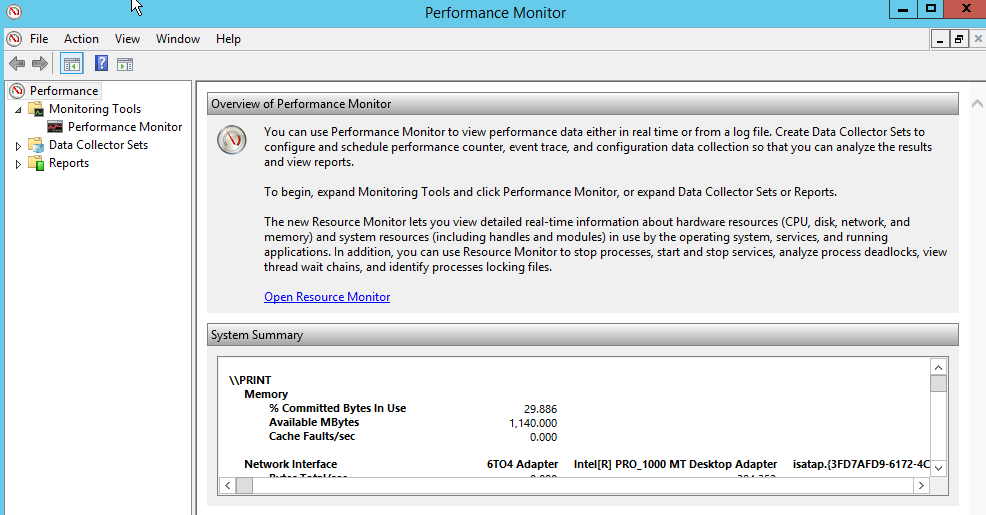


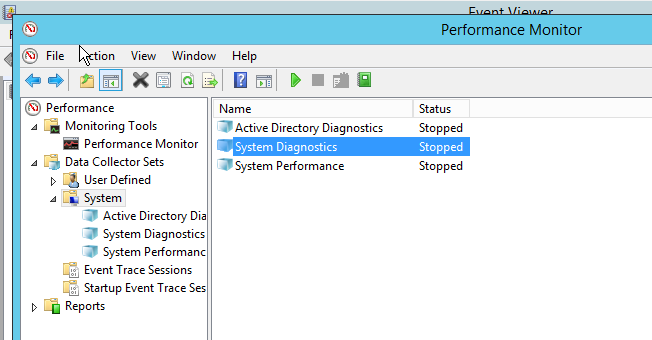
Part 2: Monitoring Print Services

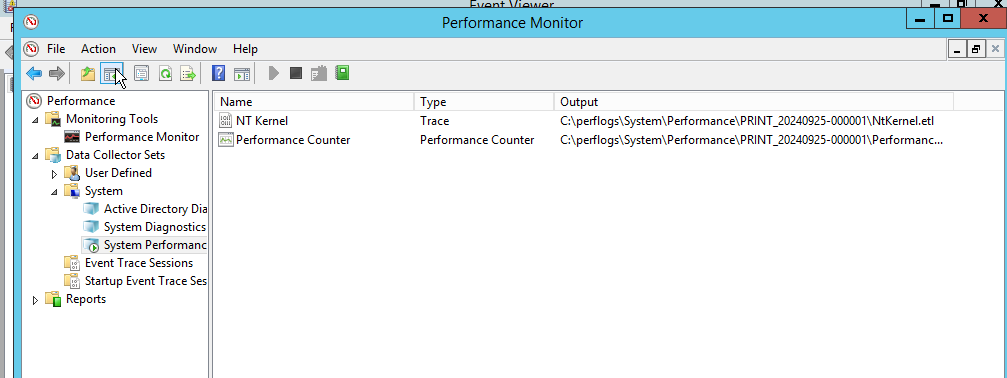
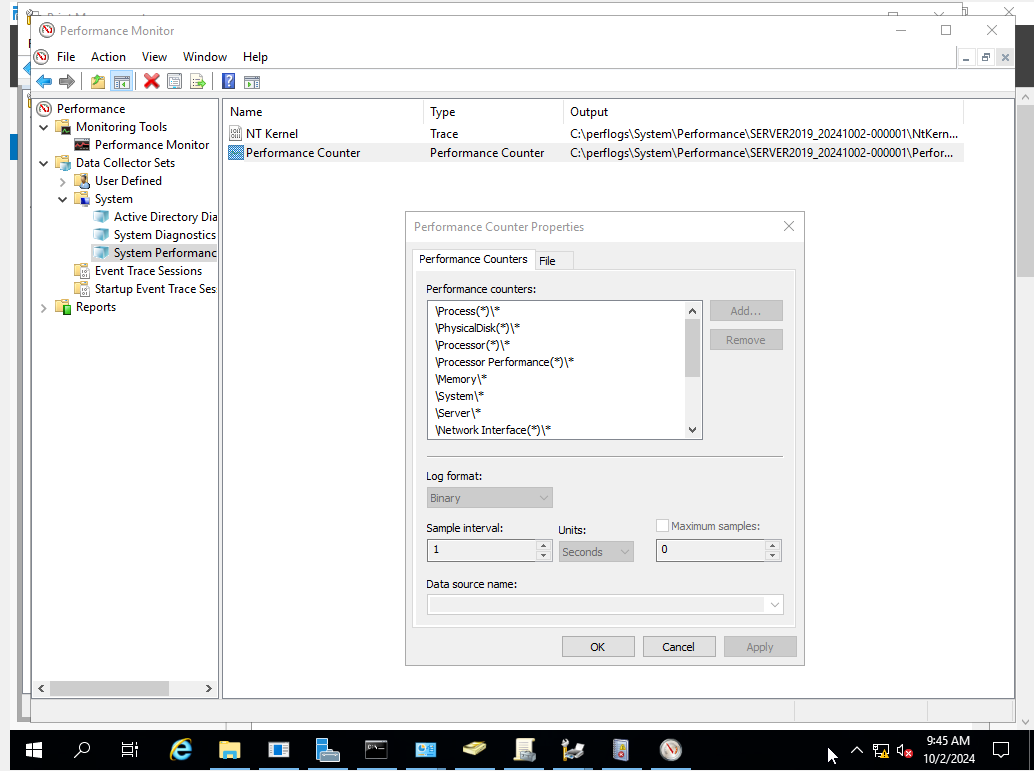
Objective: Familiarize yourself with monitoring tools available in Windows Server 2019.

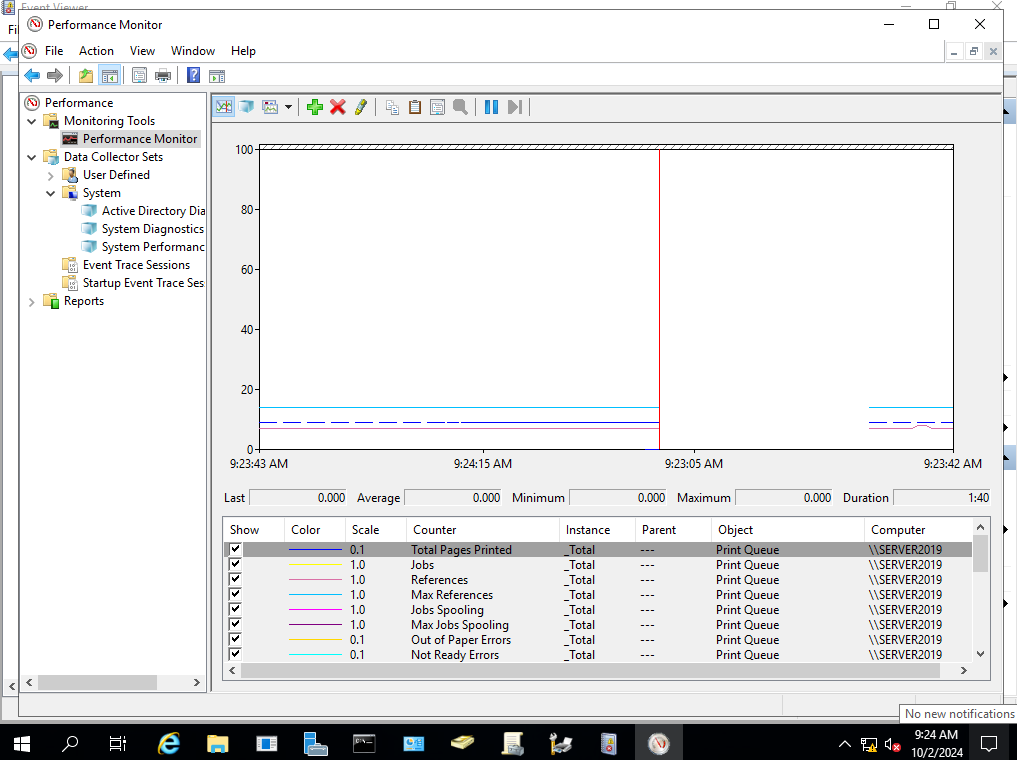
1. Event Viewer:
   * Open Event Viewer (run eventvwr.msc). 
   * Navigate to Applications and Services Logs > Microsoft > Windows > PrintService.  
     
   * Review logs for print jobs, errors, and warnings.

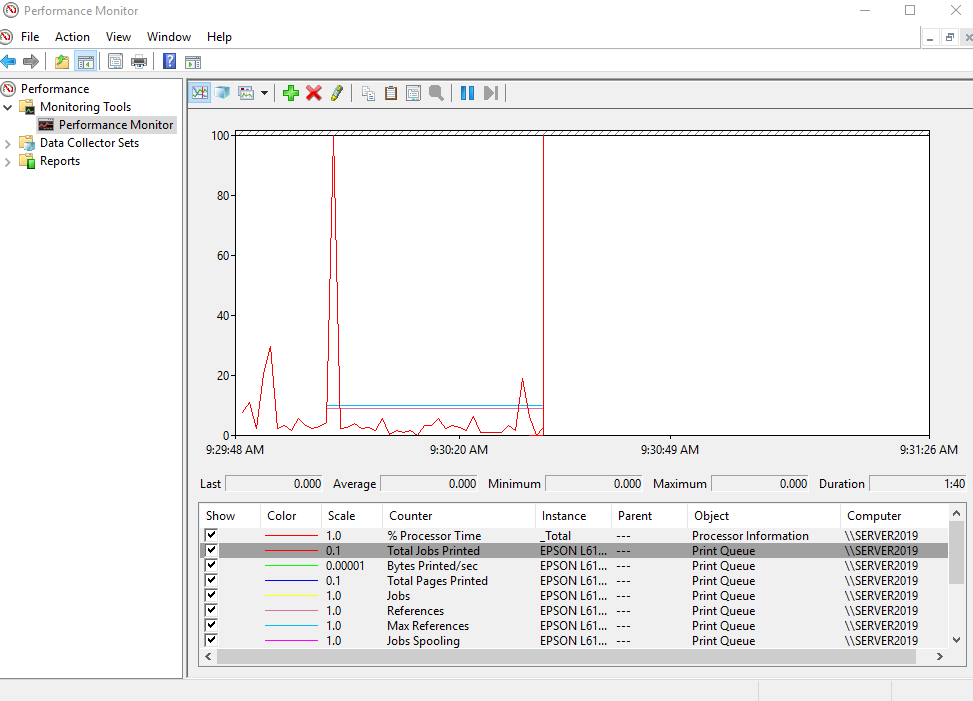
 

1. Performance Monitor:
   * Open Performance Monitor (run perfmon). 
   * In the left pane, expand Data Collector Sets > System.

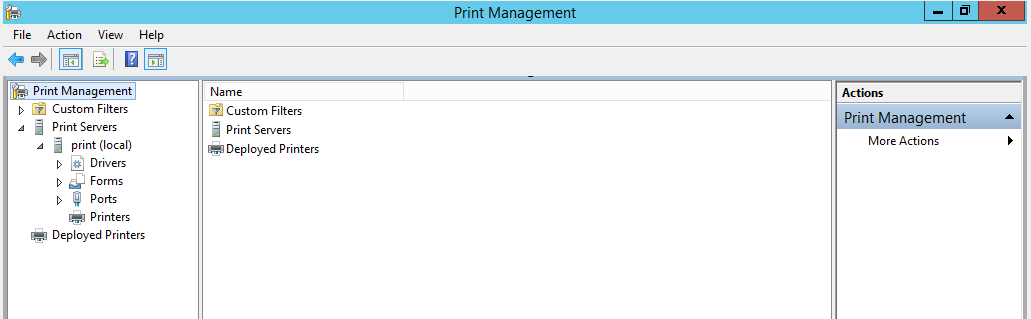


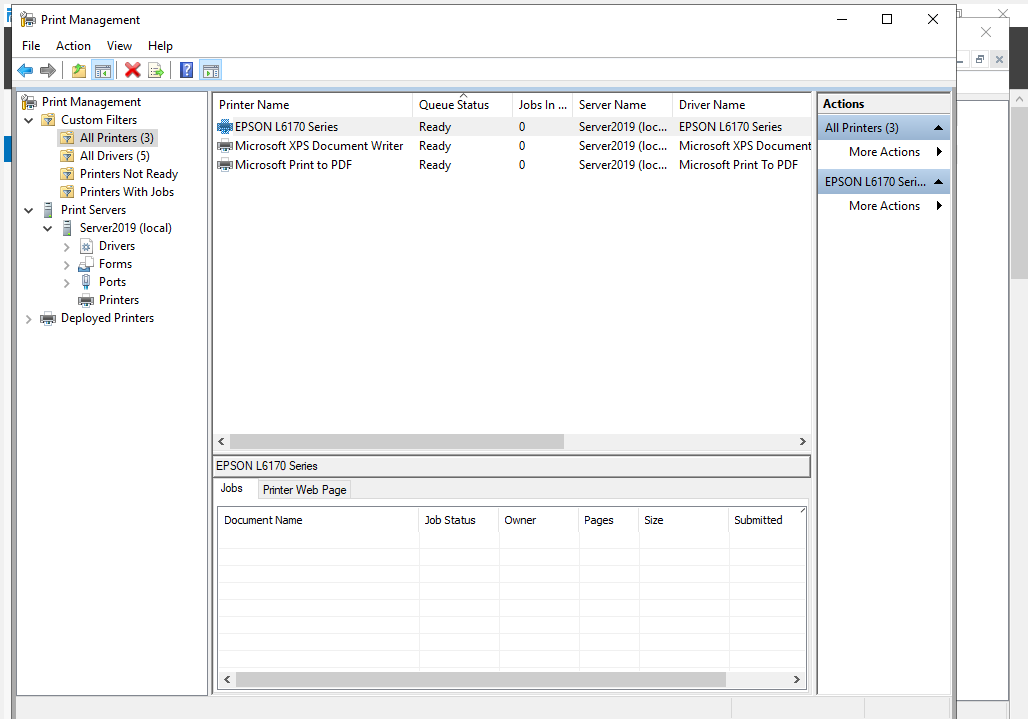
* + Right-click System Performance and select Start. 
  + Monitor performance metrics related to print services. 

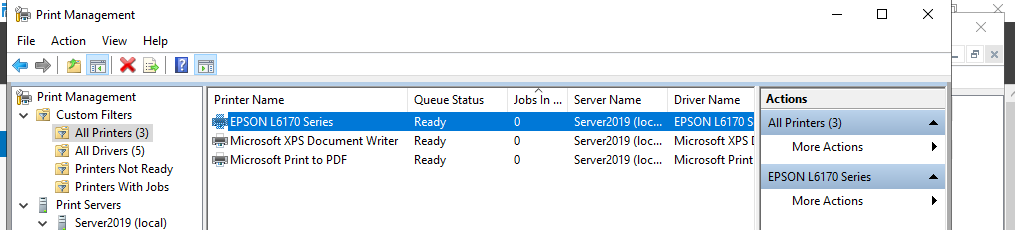




1. Using Print Management Console:
   * Open Print Management from Server Manager.



* + View active print jobs and their status.
  + Use the Printers node to check the status of all printers.



Part 3: Exploring Third-Party Monitoring Tools

1. Research at least two third-party print monitoring tools

a. PrintVisor

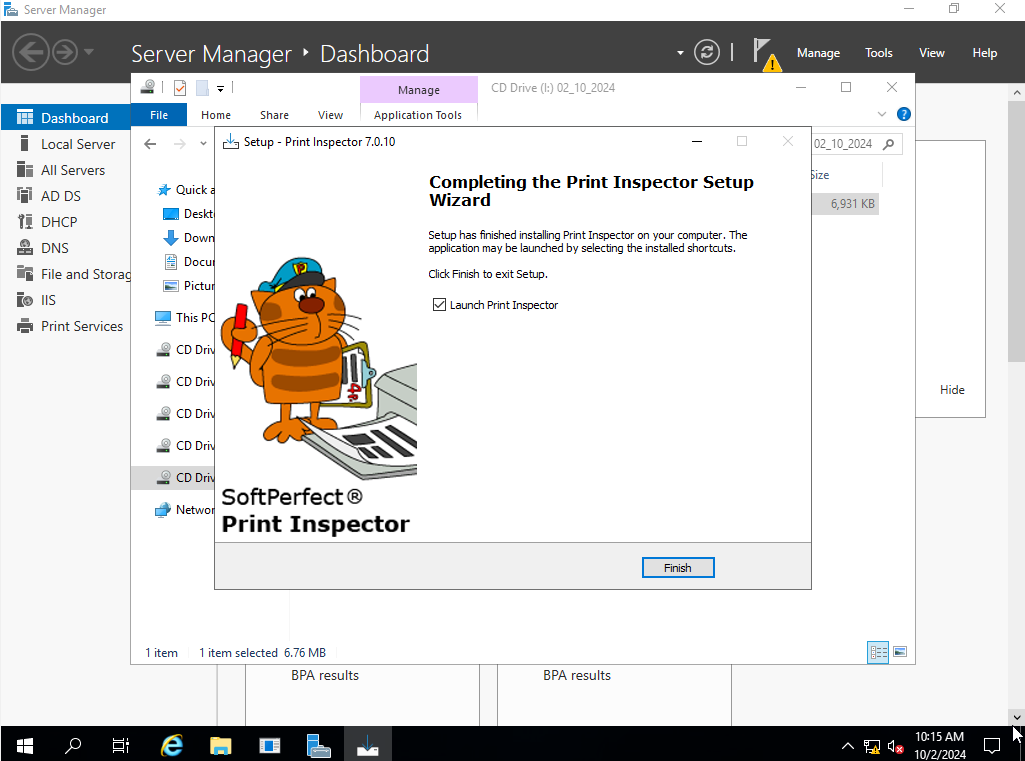
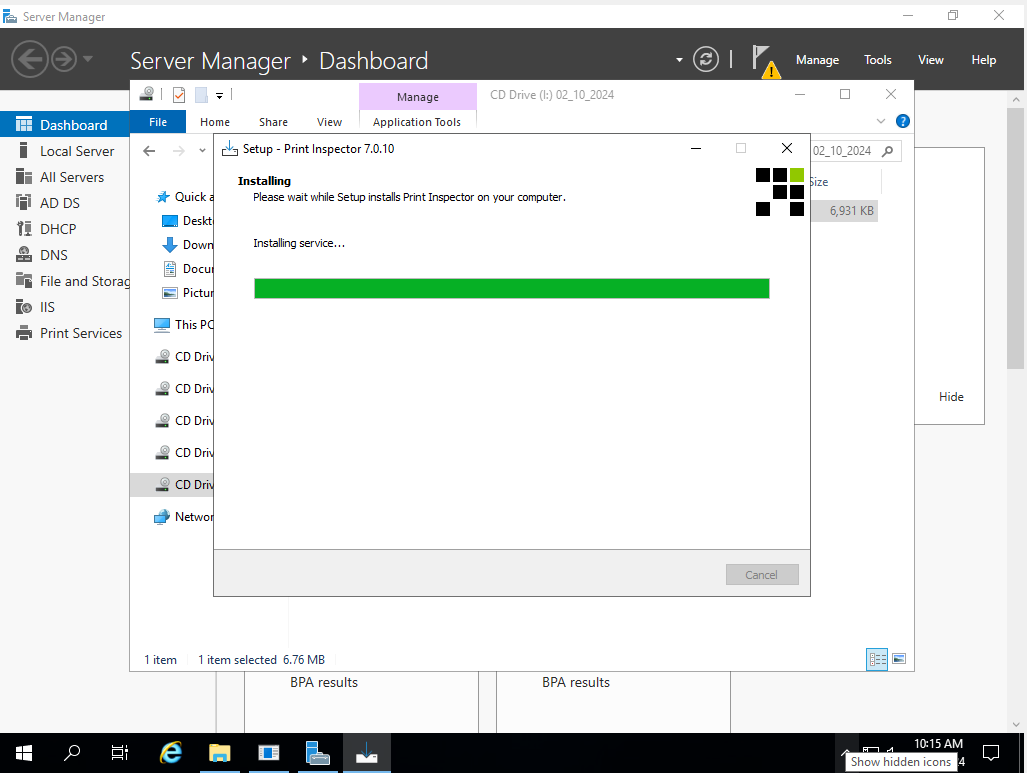
* Features: Provides detailed print job tracking, user activity monitoring, reporting capabilities, and alerting for printer issues. Supports multiple printers and offers administrative controls.
* Pricing: Typically starts around $299 for a single server license, with tiered pricing based on the number of printers.
* Compatibility: Fully compatible with Windows Server 2019 and designed for Windows environments.

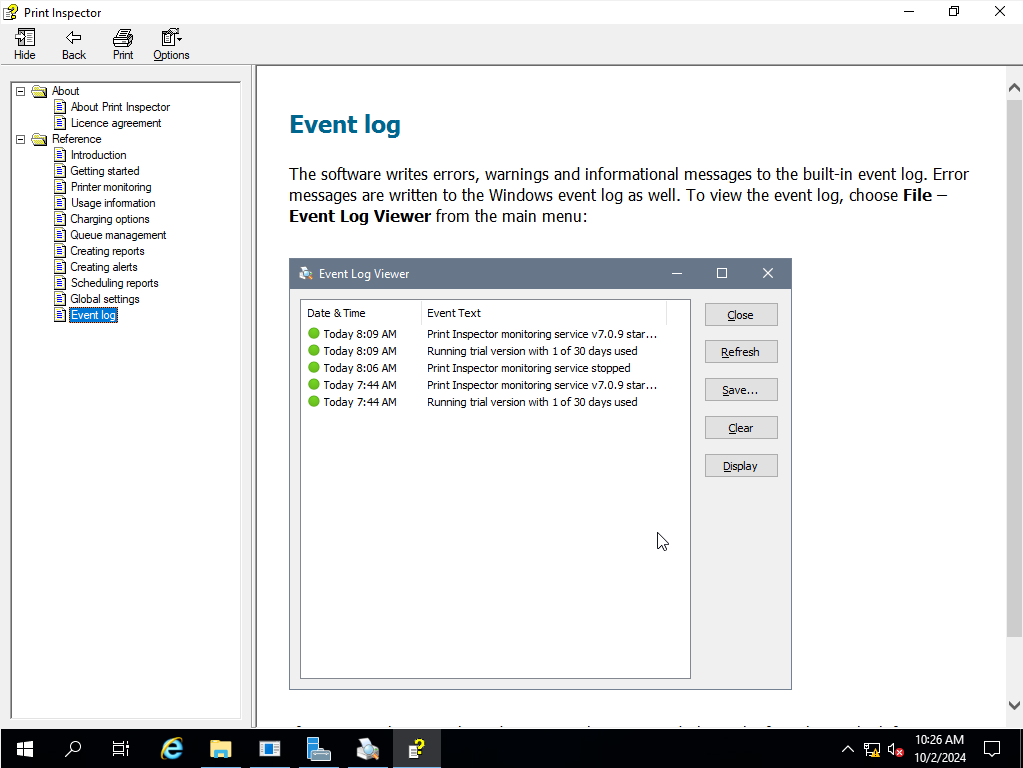
b. Print Inspector

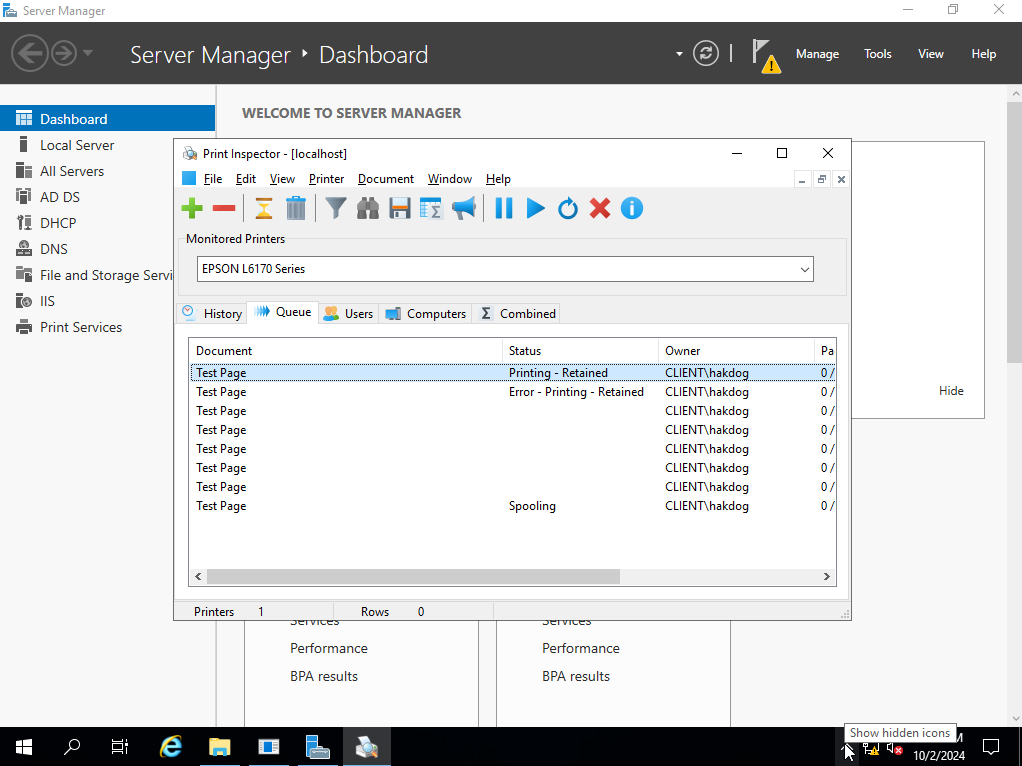


* Features: Offers comprehensive print job tracking, user activity reporting, and alerting. Supports printer management and provides insights into print usage.
* Pricing: Starts at approximately $200 for a single server, with licenses scaling based on the number of printers.
* Compatibility: Designed specifically for Windows environments, compatible with Windows Server 2019.

1. Install and Configure:
   * Choose one of the tools to install in your environment.

Downloaded Print Inspector:  
 

* + Follow the installation instructions provided by the tool's documentation. 
  + Configure it to monitor your print services.

1. Test and Report Findings:
   * Generate a report or dashboard from the tool. 
   * Analyze the collected data (e.g., print volume, errors, user activity).

- I used EPSON L6170 Series as printer and the print queue shows jobs with varying statuses. One job is currently "Printing - Retained", while another has encountered an "Error - Printing - Retained" issue. One job is still in the spooling phase, indicating it is being prepared for printing. All of these jobs were submitted by the user **hak dog** from my CLIENT domain. There are multiple instances of **Test Page** jobs, which suggest repeated printing attempts or tests, possibly due to troubleshooting or system checks.

Rubric

| **Criteria** | **1 (Unsatisfactory)** | **2 (Needs Improvement)** | **3 (Satisfactory)** | **4 (Good)** | **5 (Excellent)** | **Score** |
| --- | --- | --- | --- | --- | --- | --- |

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| **Part 1: Setting Up Print Services** |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- |
| **Domain Installation** | No domain created | Domain created with errors | Domain created correctly | Domain configured well | Domain configured and documented thoroughly |  |

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| **Client Connection** | Client not connected | Connection attempt failed | Client connected but with issues | Client connected correctly | Client connected and documented well |  |

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| --- | --- | --- | --- | --- | --- | --- |
| **Print Services Role Installation** | Role not installed | Role installed with issues | Role installed correctly | Role installed and configured | Role installed, configured, and documented thoroughly |  |

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| **Printer Installer Conversion** | No installer found | Installer conversion attempted but failed | Installer converted but not used | Installer converted and used | Installer converted, used, and documented well |  |

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| **Network Printer Deployment** | Printer not deployed | Deployment failed | Printer deployed but not functional | Printer deployed correctly | Printer deployed, tested, and documented well |  |

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| **Part 2: Monitoring Print Services** |  |  |  |  |  |  |

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| **Event Viewer Usage** | Event Viewer not opened | Opened but no logs reviewed | Logs reviewed but superficial | Logs reviewed with some analysis | Logs reviewed with thorough analysis and documentation |  |

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| --- | --- | --- | --- | --- | --- | --- |
| **Performance Monitor Usage** | Performance Monitor not opened | Opened but no metrics monitored | Metrics monitored but not analyzed | Metrics monitored with some analysis | Metrics monitored, analyzed, and documented thoroughly |  |

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| --- | --- | --- | --- | --- | --- | --- |
| **Print Management Console Usage** | Console not opened | Opened but functionality not used | Active jobs viewed superficially | Active jobs viewed with some detail | Active jobs viewed and documented thoroughly |  |

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| **Part 3: Exploring Third-Party Tools** |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- |
| **Research on Tools** | No tools researched | Research incomplete | Research on one tool completed | Research on two tools with some analysis | Research on two tools, detailed analysis, and comparison |  |

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| --- | --- | --- | --- | --- | --- | --- |
| **Installation and Configuration** | Tool not installed | Installation failed | Tool installed but not configured | Tool installed and configured with issues | Tool installed, configured, and documented thoroughly |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Reporting Findings** | No report generated | Report lacks detail | Report generated but lacks analysis | Report generated with some analysis | Comprehensive report with thorough analysis and documentation |  |