|  |  |  |
| --- | --- | --- |
| SCHOOL OF INFORMATION AND TECHNOLOGY | | |
| NAME: Hyra Cayambas | DATE PERFORMED: 09/25 | /50 |
| Section: IDC1 | DATE SUBMITTED: 09/25 |

# SYSADM1 – Monitoring Print Services in Windows Server 2019

# Requirement:

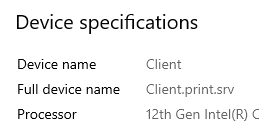
* A virtual machine running Linux and Windows OS

Part 1: Setting Up Print Services

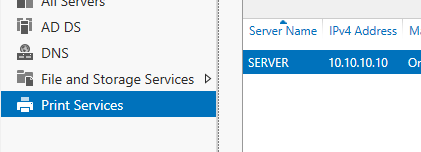
1. Install and configure **print.srv** domain



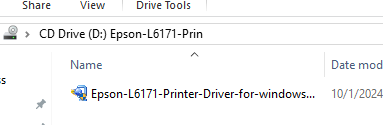
1. Connect one client to the recently created domain



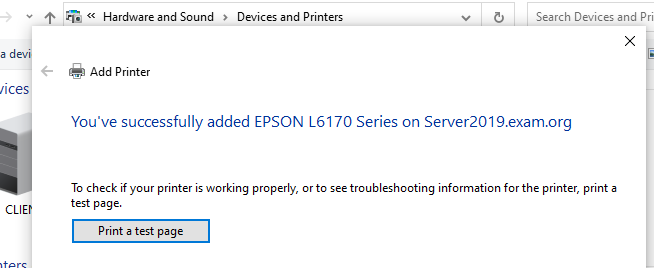
1. Install Print Services Role:

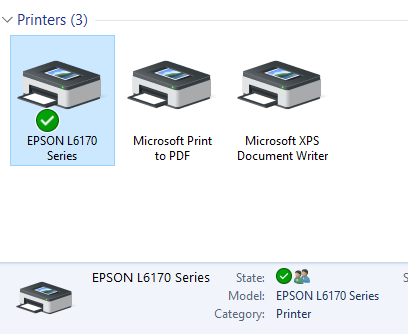


1. Search the internet for any printer installer and convert it to iso



1. Install and deploy it as network printer

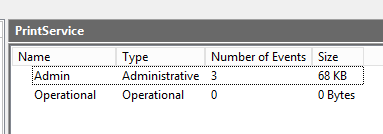


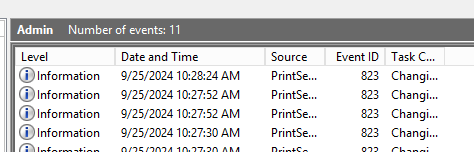


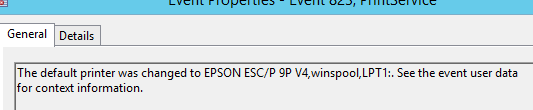
Part 2: Monitoring Print Services

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

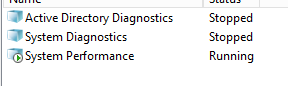
1. Event Viewer:
   * Open Event Viewer (run eventvwr.msc).
   * Navigate to Applications and Services Logs > Microsoft > Windows > PrintService.
   * Review logs for print jobs, errors, and warnings.



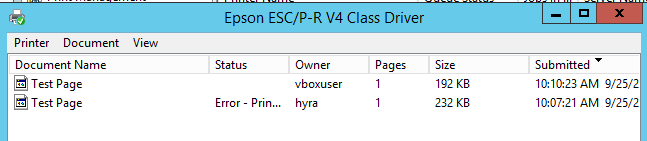




1. Performance Monitor:
   * Open Performance Monitor (run perfmon).
   * In the left pane, expand Data Collector Sets > System.
   * Right-click System Performance and select Start.
   * Monitor performance metrics related to print services.

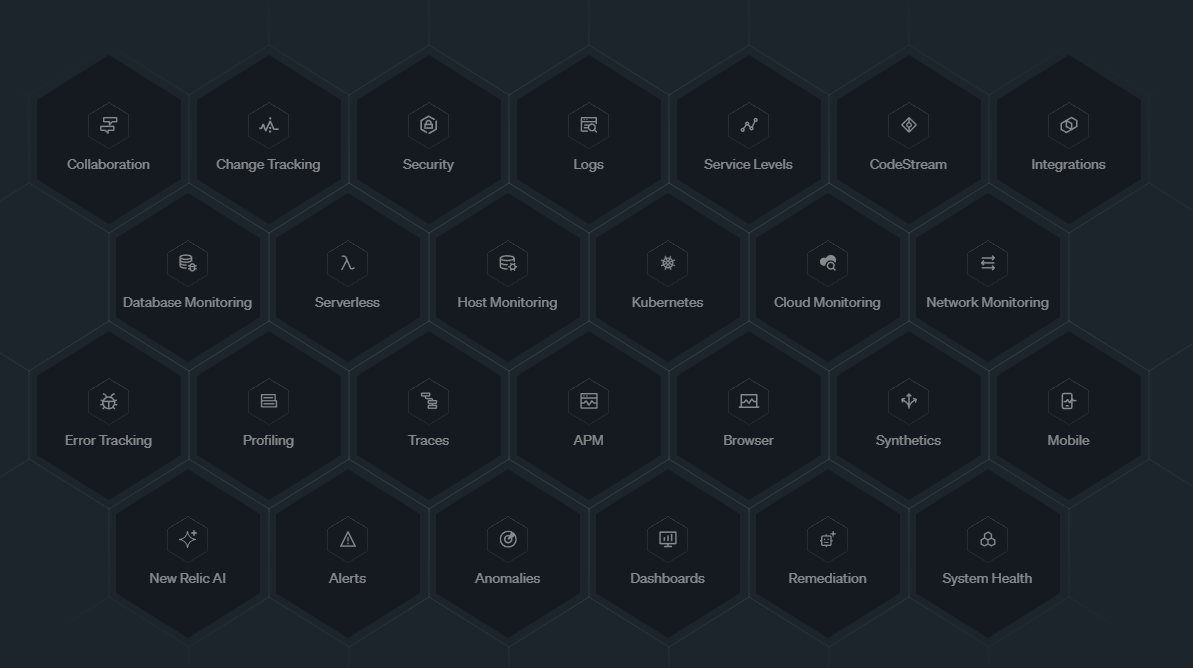


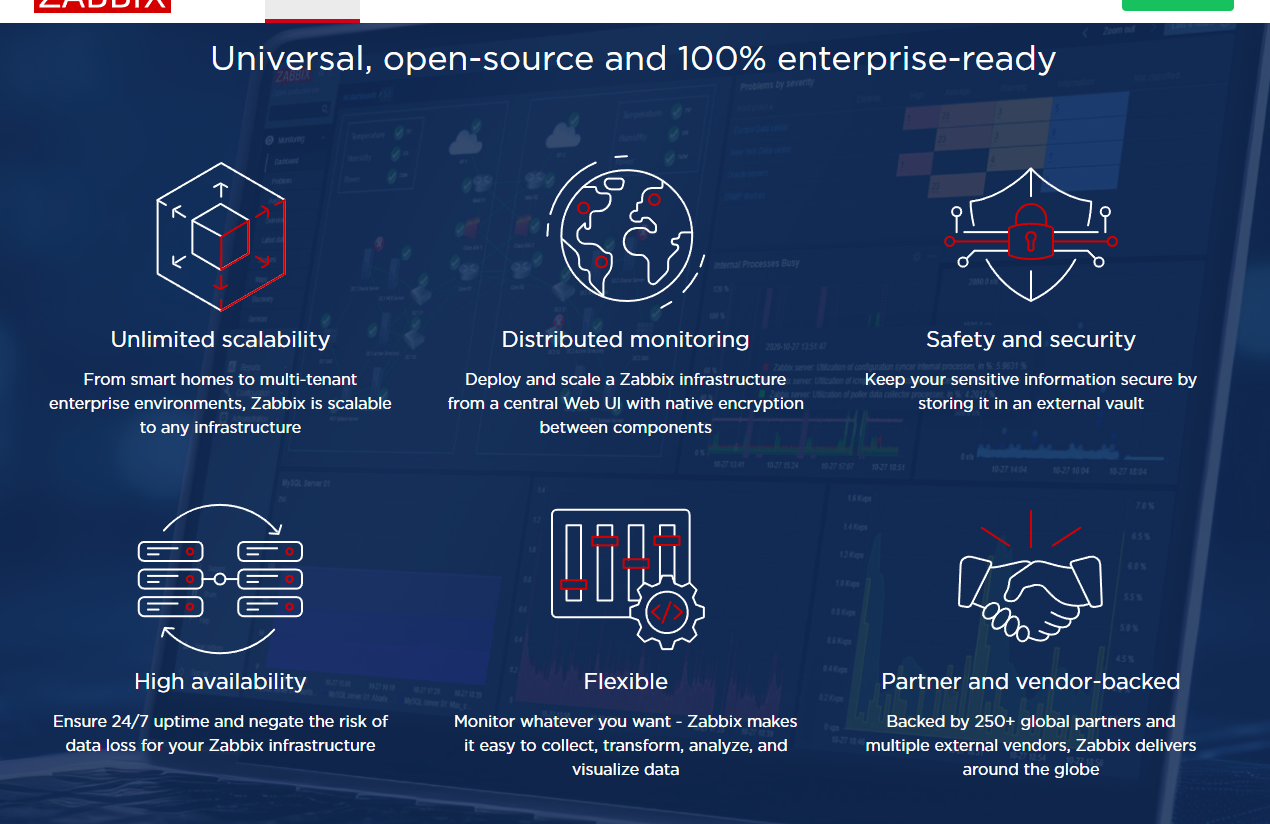
1. Using Print Management Console:
   * Open Print Management from Server Manager.
   * View active print jobs and their status.
   * Use the Printers node to check the status of all printers.

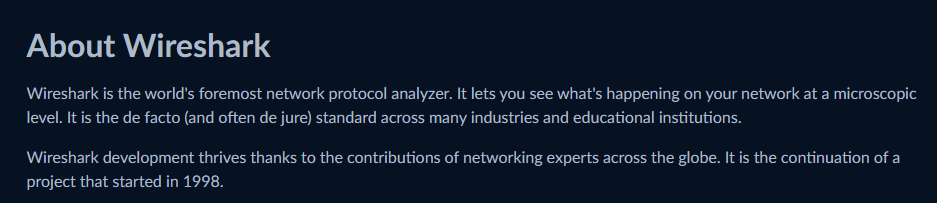


Part 3: Exploring Third-Party Monitoring Tools

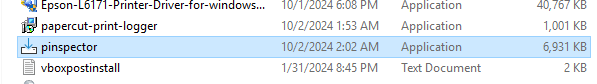
1. Research at least two third-party print monitoring tools
   * Consider factors such as features, pricing, and compatibility with Windows Server 2019.



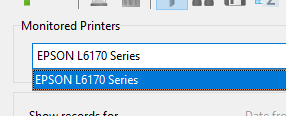


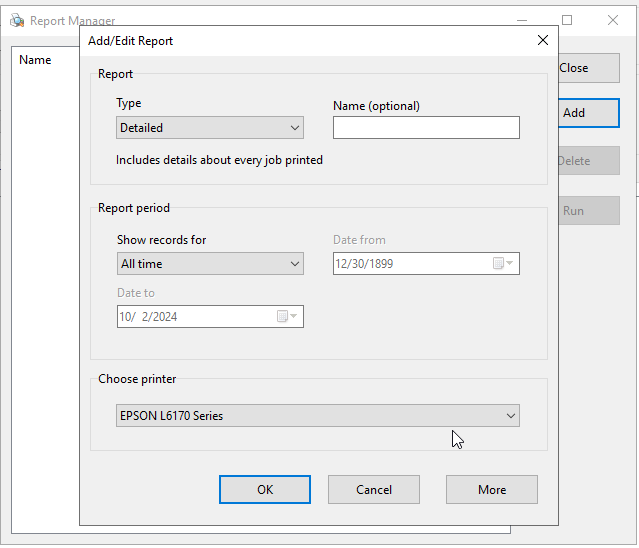


1. Install and Configure:
   * Choose one of the tools to install in your environment.
   * Follow the installation instructions provided by the tool's documentation.
   * Configure it to monitor your print services.



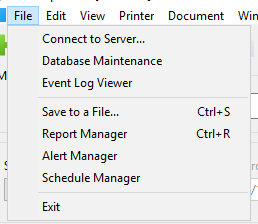
1. Test and Report Findings:
   * Generate a report or dashboard from the tool.
   * Analyze the collected data (e.g., print volume, errors, user activity).



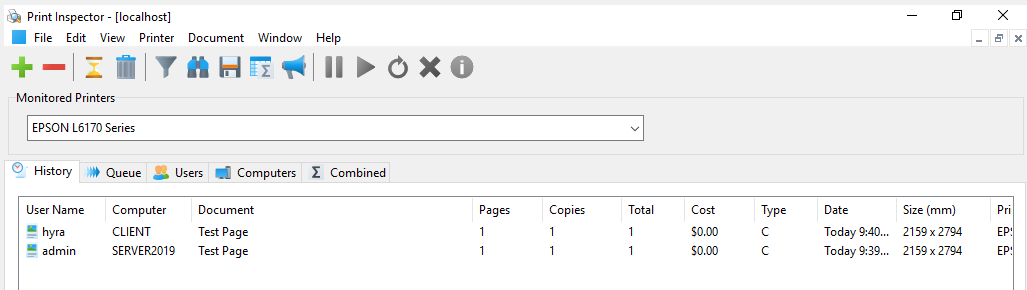


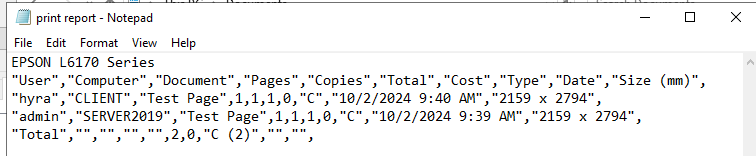
The tool I installed is called Print Inspector by SoftPerfect, Print Inspector is a robust print monitoring and management tool for corporate networks. It records detailed information about printed documents, including document name, date, page count, user name, and the computer used for printing.

I have the option of connecting the tool to my server and even a database. I have an event log viewer, a report manager, alert manager and a schedule manager for the printer services within my domain. See image below for reference.

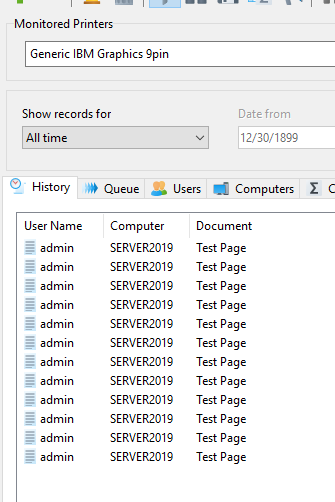


I attempted to generate a report for the short time that I have deployed a network printer within my server. The tool gave me a report containing print details such as who printed what document on a specific computer, page counts, the specific time and date and even the cost of what has been printed. I was also given the option to download the report as a CSV file which is very useful for event logging and daily reports. If only my server had a proper software for viewing CSV files so I could better demonstrate how the file looks.

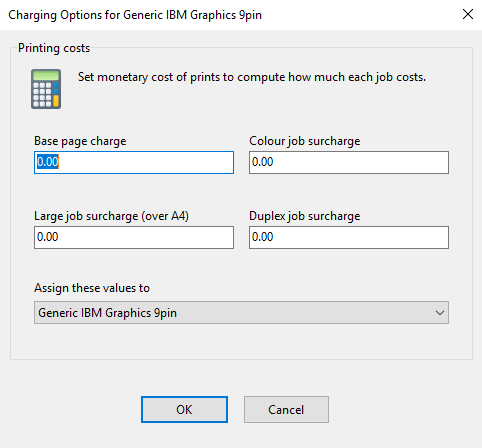




I deployed more printers to see how the interface would work when monitoring multiple printers. I have filter through individual printers or monitor all print jobs and queues as one.



The tool is very simple yet very effective in doing its job which is to monitor everything related to my server’s print services. The tool gives me, the administrator, a birds eye view of what is happening with the deployed printers within my domain. All of this is to be expected from a server monitoring tool built for a specific purpose, but what I find the most interesting about this tool is that it has the ability to compute the cost per print job and I can even configure how the computations work.



Rubric

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

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

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

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

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 |  |

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

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 |  |

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 |  |