

A Report on
“3-Day Cyber Security Hands-on Training with Next Generation Firewall”
Organized by Department of Computer Applications
in Association with IEEE GRSS Student Branch
Date: 25.07.2024 to 27.07.2024



Event Coordinators: Dr. Prabhakaran, Assistant Professor, Department of Computer Applications; Dr. Maruthamuthu, Assistant Professor, Department of Computer Applications

Mode of conduct: Offline

Report Received on 31.07.2024

Total Participants: 71 Students

Report Received on 01.08.2024

About the Cyber Security with Next Generation Firewall -Fortinet, PaloAlto

Next Generation Firewalls (NGFWs) by Fortinet and Palo Alto Networks integrate traditional firewall capabilities with advanced features like application awareness, intrusion prevention, and user identity awareness. The security against modern threats, include advanced malware and zero-day exploits, with centralized management for scalability and efficiency. Fortinet's FortiGate series and Palo Alto Networks' NGFWs are widely recognized for their comprehensive security and management capabilities, making them essential for securing today's networks.

The primary goal of Cyber Security with Next Generation Firewall -Fortinet, PaloAlto workshop provides comprehensive knowledge on Cyber Security. Discuss the latest trends and developments in cyber security, Enhance the understanding of cyber security principles and practices. Familiarize the participants with the features and functionalities of Fortinet and Palo Alto firewalls.

Inaugural Session:

The workshop commenced on July 25, 2024, at 10:00 AM. Organized by Dr. Prabhakaran, the coordinator, welcomed all the dignitaries, including the Head of the Department (HOD), Chief Guest, Resource Person and highlighted the institute's achievements and facilities.

Dr. Naveen Kumar, HOD Department of MCA, delivered a felicitation address, emphasizing the significance of the workshop and encouraging participants to actively engage and gain new insights into cyber security.

Dr. C. Yuvaraj, Principal, MITS, welcomed all attendees, emphasizing the importance of Cyber Security in today's environment and highlighted the importance of Cyber Security.

Date: 25.07.2024

Session I: “Introduction to Cyber Security”

Resource Person: Mr. Vishnu.V, Network Engineer, Terralogic Inc., Bengaluru

Mr. Vishnu. V introduced the basics of networking, discussing various challenges and applications. The session provided valuable insights into security infrastructure.

Session II: “Setting Up and Managing NGFWs”

Resource Person: Mr. Vishnu.V, Network Engineer, Terralogic Inc., Bengaluru

Session II offered hands-on experience with Fortinet and Palo Alto Networks' NGFWs, covering configuration, secure connections for remote users, and protection against cyber threats.



Date: 26.07.2024

Session I: “Monitoring and Dealing with Issues”

Resource Person: Mr. Vishnu. V, Network Engineer, Terralogic Inc., Bengaluru

Participants learned to monitor network activity in real-time, generate reports, and troubleshoot common NGFW problems.

Session II: “Best Practices and Looking Ahead”

Resource Person: Mr. Vishnu. V, Network Engineer, Terralogic Inc., Bengaluru

Best Practices and Looking Ahead focused on effective use of NGFWs, integrating them into broader security strategies, compliance with regulations (GDPR and HIPAA), and future trends such as AI-driven threat detection and cloud-based solutions.



Date: 27.07.2024

Session: I & II: Resource Person: Dr. Prabhakaran, Assistant Professor, Department of Computer Applications; Dr. Maruthamuthu, Assistant Professor, Department of Computer Applications.

An assessment was conducted to gauge participants understanding and gather feedback on the workshop experience.



Valedictory session was addressed by Dr. Srinivasan, Assistant Professor, Department of Computer Applications, MITS, summarize the workshop's activities and acknowledging the support from the college management.

Outcome of the Workshop:

- **Understanding the NGFW Technology:** Participants gained comprehensive knowledge of NGFWs from Fortinet and Palo Alto Networks, including advanced features like application awareness and centralized management.
- **Practical Hands-on Experience:** Practical sessions equipped participants with skills to set up, configure, and manage NGFWs, control network access, set up secure connections, and defend against cyber threats.
- **Focus on Monitoring and Troubleshooting:** Participants learned to monitor network activity, generate reports, and troubleshoot NGFW issues effectively.
- **Best Practices and Compliance:** Participants explored best practices, discussed regulatory compliance (GDPR and HIPAA), and examined future trends in NGFW technology.

Overall, the workshop successfully enhanced the participants' understanding of NGFW technology and equipped them with practical skills crucial for effective cyber security measures in their organizations. Participants left with actionable insights and a commitment to integrating NGFWs into their security strategies.