Work Breakdown Structure (WBS)

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**Date:** 02/04/2025

**Project Name:** Linux Network Performance Evaluation

1. Requirement Analysis 03/03/2025 – 04/04/2025
   1. Entry Criteria
      1. Team Kick-off Meeting
      2. Team-Client Kick-off Meeting
      3. Team Contract
      4. Stakeholder Register
      5. Project Charter
      6. Meeting Minutes (Team & Client)
   2. Develop Project Plans
      1. Stakeholder Management Strategy
      2. Risk Register (Version 1)
      3. Issue Register (Version 1)
      4. Communications Management Plan
      5. Scope Statement
      6. Work Breakdown Structure (WBS)
      7. Project Schedule
         1. Schedule baseline showing originally planned activities with their durations and milestones
         2. Network Diagram
         3. Critical Path Analysis
      8. Upskilling Plan
      9. Estimated Cost
      10. Milestone Report (Version 1)

**Milestone 1 – Project Proposal Submission**

* 1. Exit Criteria
     1. Client Feedback on Proposal Document
     2. Client Approval of Project Proposal

1. Evaluation Planning 07/04/2025 – 06/06/2025
   1. Entry Criteria
      1. Client Approval of Project Proposal
   2. Researching and Upskilling
      1. Team members upskill for necessary skills
      2. Network Tools (iPerf & D-ITG)
   3. Define Evaluation Scenarios
   4. Define Evaluation Environment
   5. Exit Criteria
      1. Client and Mentor Feedback on Evaluation Planning

**Milestone 2 – Mid-Term Review**

1. Evaluation Case Development
   1. Entry Criteria
      1. Client and Mentor Feedback on Evaluation Planning
   2. Define Evaluation Scenarios
      1. Create Scripts for Automation of Evaluation

***The Evaluation Environment Setup and Evaluation Execution phases combined will have three sprints, one for each Linux operating system.***

1. Evaluation Environment Setup
   1. Entry Criteria
   2. Configuration of Two Computers as Routers
      1. Configure static IP addresses and subnet masks
      2. Configure Three different Network
      3. Testing connection between the network and hosts
   3. Installing Network Tools/ Software (iPerf and D-ITG)
   4. Setting up Monitoring Infrastructure
   5. Exit Criteria
      1. Client Feedback on the Technical Infrastructure for Evaluation
      2. Improvement Based on Feedback
2. Evaluation Execution Phase 13/10/2025 - 26/10/2025
   1. Entry Criteria
      1. Functional Evaluation environment and Approved
   2. Exit Criteria
   3. Evaluations performed for each OS and results documented
      1. Conduct 10 Evaluation runs for each Operating System on TCP
         1. Each Evaluation consists of 12 packet sizes
         2. Execute Evaluation cases, scripts
      2. Conduct 10 Evaluation runs for each Operating System on UDP
         1. Each Evaluation consists of 12 packet sizes
         2. Execute Evaluation cases, scripts
   4. Analyse Performance Metrics to determine Operating System Performance
   5. Client Feedback

Sprint 1: Ubuntu

Evaluation Environment Setup (21/07/2025 – 03/08/2025)

Evaluation Execution Phase (04/08/2025 – 17/08/2025)  
**Milestone 3 – Completion of Ubuntu Evaluation**

Sprint 2: Fedora

Evaluation Environment Setup (18/08/2025 – 31/08/2025)

Evaluation Execution Phase (01/09/2025 – 14/09/2025)

**Milestone 4 – Completion of Fedora Evaluation**

Sprint 3: Kali

Evaluation Environment Setup (15/09/2025 – 28/09/2025)

Evaluation Execution Phase (29/09/2025 – 12/10/2025)

**Milestone 5 – Completion of Kali Evaluation**

1. Evaluation Closure (27/10/2025 - 31/10/2025)
   1. Entry Criteria
      1. Compile all the data for each operating systems into excel spreadsheet
   2. Exit Criteria
      1. Document Closure Report
      2. Test Results and Analysis
      3. Final Poster
      4. Provide Client with excel spreadsheet of all data along with Log files.
      5. Client Feedback

**Milestone 6 – Final Poster**