**Task 3 Info Sec  
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**📊 Executive Summary**

This report analyzes **99,999** HTTP requests from a web server log (May 1–7, 2025). Key findings include:  
✅ **Most requests were successful** (69,894 200 OK responses).  
⚠️ **14.06% failed requests** (14,064 errors, mostly 404 Not Found).  
🔝 **Top active user**: 192.168.1.41 (2,093 total requests).  
📅 **Daily average**: **14,285 requests/day**.

**📈 Detailed Breakdown**

**1. Request Methods**

| **Method** | **Count** | **% of Total** |
| --- | --- | --- |
| GET | 80,072 | **80.07%** |
| POST | 19,928 | **19.93%** |

🔹 **GET requests dominate**, typical for content retrieval (e.g., web pages, images).  
🔹 **POST requests** (20%) likely include form submissions or API calls.

**2. Unique IP Addresses**

* **50 unique IPs** accessed the server.
* **Top 3 IPs by activity**:
  1. 192.168.1.41 (**1,665 GETs + 428 POSTs** = **2,093 total**).
  2. 192.168.1.7 (1,648 GETs + **436 POSTs**).
  3. 192.168.1.46 (1,662 GETs + 421 POSTs).

🔹 **Suspicious activity?**

* 192.168.1.7 has the **highest POST requests** (436), possibly indicating aggressive form submissions.

**3. Failed Requests (Errors)**

| **Status Code** | **Count** | **% of Failures** |
| --- | --- | --- |
| 404 | 4,968 | **35.3%** |
| 401 | 2,049 | **14.6%** |
| 400 | 2,035 | **14.5%** |
| 403 | 1,968 | **14.0%** |

🔹 **Total failures**: **14,064 (14.06% of all requests)**.  
🔹 **Peak failure times**:

* **3:00 AM** (631 errors)
* **11:00 AM** (623 errors)
* **2:00 AM** (617 errors)

⚠️ **Action Item**: Investigate **404s** (broken links) and **401/403s** (authentication issues).

**4. Traffic Patterns**

**📅 Daily Requests**

| **Date** | **Requests** | **Failures** |
| --- | --- | --- |
| 06/May/2025 | Highest | 2,081 |
| 07/May/2025 | Lowest | 1,935 |

🔹 **Average daily requests**: **14,285**.

**⏰ Hourly Trends**

* **Peak hours**: **3:00 AM, 11:00 AM, 2:00 PM**.
* **Lowest activity**: **12:00 AM–5:00 AM**.

**5. Top Users & Methods**

| **Metric** | **IP Address** | **Count** |
| --- | --- | --- |
| **Most Active** | 192.168.1.41 | 2,093 |
| **Top GETs** | 192.168.1.41 | 1,665 |
| **Top POSTs** | 192.168.1.7 | 436 |

**📊 Visual Summary**

Success (200/201) █████████████████ 79.84%

Failures (4xx/5xx) ████ 14.06%

Other (3xx) ██ 6.10%