
Log Parsing Example: Extracting HTTP Status Codes

Search Query:

```
_sourceCategory=Labs/Apache/Access  
| parse "HTTP/1.1\" * " as status_code
```

Explanation

1. `_sourceCategory=Labs/Apache/Access`

- Filters logs to only include those from the Labs/Apache/Access category (Apache access logs).
- This ensures you're only working with relevant data.

2. `parse "HTTP/1.1\" * " as status_code`

- The parse operator looks at the raw log line and extracts the value that comes **after HTTP/1.1" and before the next space**.
- In Apache access logs, this spot is where the **HTTP status code** (e.g., 200, 404, 500) appears.

Example raw log:

```
192.168.1.5 - - [19/Aug/2025:10:45:12 +0000] "GET /index.html HTTP/1.1" 200 2326
```

- After "HTTP/1.1" → the next value is **200** → that gets extracted as `status_code`.

3. Result:

- Each log entry now has a new field called `status_code`.
 - You can run further analysis on this field (like grouping, counting, or filtering).
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Example Extended Query

```
_sourceCategory=Labs/Apache/Access  
| parse "HTTP/1.1\" * " as status_code  
| count by status_code  
| sort by _count desc
```

Explanation:

- count by status_code → Groups logs by status codes (200, 404, 500, etc.).
- sort by _count desc → Shows the most common status codes first.

Result Example:

```
status_code  _count
```

```
-----  -----  
  
200         12500  
404          730  
500          120
```

✅ Why This Matters

- **Status codes** tell you how your web server is responding:
 - 200 = OK (healthy traffic)
 - 404 = Not Found (possible broken links or scans)
 - 500 = Server Errors (something is wrong)
 - By parsing and counting them, you can:
 - Detect spikes in 404 (possible recon attempts).
 - Monitor 500 errors (system health issues).
 - Track overall traffic quality.
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