Apache Logs Format:

APACHE HTTP SERVER:

Apache Server is a web server used to serve web content over the internet by accepting requests from clients (like web browsers) and delivering web pages in response

APACHE LOGS:

To effectively manage a web server, it is necessary to get feedback about the activity and performance of the server as well as any problems that may occur. The Apache HTTP Server provides very comprehensive and flexible logging capabilities.

- Access Log
- Error Log
- SSL Log
- Custom Log
- Rewrite Log
- Security Log
- Proxy Log
- Cache Log
- Script Log
- Virtual Host Log

There are two main types:

- Access log
- Error log

Access Log:

Location:

Ubuntu - /var/log/apache2/access.log

Windows- C:\Apache24\logs\

Access Log in Apache is a log file that records all incoming requests to the web server. Each entry in the access log provides detailed information about a client's request.

Format:

127.0.0.1 - frank [07/Jul/2025:10:35:21 +0000] "GET /index.html HTTP/1.1" 200 2326 "http://example.com/start.html" "Mozilla/5.0 ..."

- Client IP address who made the request
- **Timestamp** when the request was made
- HTTP method such as GET or POST
- Requested resource the URL or file requested
- Response status code like 200 (OK), 404 (Not Found), etc.
- User agent browser or device making the request
- **Referrer** the page that linked to the requested resource (if any)

Apache Error Log:

Apache Error Log records all server-side errors, warnings, and diagnostic messages generated by the Apache HTTP Server.

It helps administrators troubleshoot problems related to server configuration, module failures, or runtime issues.

Common errors are

- Server startup and shutdown messages
- Configuration errors
- Module load failures
- Request processing errors (e.g., file not found, permission denied)
- Script errors (CGI, PHP)
- Security warnings

Location:

C:\Apache24\logs\error.log

/var/log/apache2/error.log

Format:

[Mon Jul 7 10:35:21.123456 2025] [error] [client 192.168.1.10] File does not exist: /var/www/html/missing.html

- [Date Time] Timestamp of the log entry
- [loglevel] Severity level (e.g., error, warn, notice, info, debug)
- [client IP] IP address of the client causing the error (if relevant)
- message Description of the error or event

Level	Description
emerg	System is unusable
alert	Immediate action needed
crit	Critical conditions
error	Runtime errors
warn	Warnings
notice	Normal but significant
	events
info	Informational messages
debug	Debug-level messages