

**LOGZILLA DOCUMENTATION**

# Testing and Verification

Validate LogZilla rewrite and Lua rules with representative inputs, logzilla rules validate and test commands, rule reload, and runtime error review

Data Transforms · Generated May 3, 2026 · [logzilla.ai/docs/data-transforms/testing-and-verification](https://logzilla.ai/docs/data-transforms/testing-and-verification)

## Testing and verification

Testing ensures transformation logic behaves as expected before and after rollout. The following practices apply to rewrite rules, Lua rules, and Apps that include transformation logic.

### Prepare representative inputs

- Use device-specific sources when available to generate realistic traffic.
- For custom pipelines or ad hoc tests, send events via the [HTTP Event Receiver](https://www.logzilla.ai/docs/receiving-data/http-event-receiver) (<https://www.logzilla.ai/docs/receiving-data/http-event-receiver>).
  - Structured JSON enables explicit control over `host`, `program`, and `fields`.
  - Unstructured JSON under `/incoming/raw` is suitable for quick experiments that rely on rules to extract values.

### Manage rules during tests

- Keep test changes in a distinct rule set or app build.
- Validate syntax and structure prior to enabling.
- Reload rules after updates and monitor for errors.

```
# Validate a rule file before enabling
logzilla rules validate /path/to/rule.yaml

# Test a rule against sample data (where applicable)
logzilla rules test --path /path/to/rule.yaml

# Enable or disable rules and reload after changes
logzilla rules enable "Test Rule"
logzilla rules disable "Test Rule"
logzilla rules reload

# Inspect recent runtime errors for rules
logzilla rules errors
```

### Observe parser health and field outcomes

- Confirm that the parser processes events without errors or stalls.
- Inspect field values and tag distributions to verify normalization and enrichment.

```
# Parser performance and health overview
logzilla events parser-stats
```

```
# Review values seen for fields and tags
logzilla events values --scope fields --limit 50
logzilla events values --scope tags --limit 50

# Review field and tag cardinality (optional)
logzilla events cardinality --scope all
```

## Verify in the UI

- Run focused searches to confirm expected tags and normalized fields are present.
- Check pre-built or custom dashboards for visual confirmation and KPI impact.
- Confirm triggers that depend on newly enriched fields behave as intended.

## Use traffic capture and replay as needed

- Capture short windows of traffic to reproduce an issue or verify a fix consistently.

```
# Start a short capture and store decoded events
logzilla sniffer start --filename sniff-{t}.out --time 60 --live

# Stop capture or check status
logzilla sniffer status
logzilla sniffer stop

# Replay captured traffic for regression testing
logzilla sniffer replay sniff-2025-01-01.out
```

## Rollout and fallback

- Stage changes in a lower environment when possible.
- Monitor parser metrics and rule errors immediately after enabling.
- Maintain the ability to disable a problematic rule quickly if an unexpected outcome is observed.

## Common pitfalls to avoid

- Overly broad matches that unintentionally rewrite many events.
- High-cardinality tags created by free-form data (for example, unique identifiers or full message fragments).
- Inconsistent field names that reduce dashboard and alert reuse.
- Silent failures due to unvalidated configuration changes.

## Related reading

- [Overview and decision guide](https://www.logzilla.ai/docs/data-transforms/transforming-event-streams) (https://www.logzilla.ai/docs/data-transforms/transforming-event-streams)
- [Rewrite rules](https://www.logzilla.ai/docs/data-transforms/rewrite-rules) (https://www.logzilla.ai/docs/data-transforms/rewrite-rules)
- [Lua rules](https://www.logzilla.ai/docs/data-transforms/lua-rules) (https://www.logzilla.ai/docs/data-transforms/lua-rules)
- [Creating custom apps](https://www.logzilla.ai/docs/data-transforms/creating-custom-apps) (https://www.logzilla.ai/docs/data-transforms/creating-custom-apps)
- [Command Line Tools -- Data Commands](https://www.logzilla.ai/docs/command-line-tools/data-commands) (https://www.logzilla.ai/docs/command-line-tools/data-commands)