DataLens FAQs

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Getting Started

Q: What is DataLens?

A: DataLens is NovaTech's unified observability platform for monitoring your infrastructure, applications, and business metrics. Key features include: - Metrics collection and visualization - Log aggregation and search - Distributed tracing - Custom dashboards - Intelligent alerting - Natural language queries (beta)

Q: How do I send data to DataLens?

A:

Metrics (OpenTelemetry):

```yaml
# otel-config.yaml
exporters:
  datalens:
    endpoint: https://ingest.datalens.novatech.com
    api_key: ${DATALENS_API_KEY}
```

Logs (Fluent Bit):

```
[OUTPUT]
    Name  http
    Match *
    Host  ingest.datalens.novatech.com
    Port  443
    URI   /api/v1/logs
    Header Authorization Bearer ${DATALENS_API_KEY}
```

Application (SDK):

```
const datalens = require('@novatech/datalens');

datalens.init({
  apiKey: process.env.DATALENS_API_KEY,
  service: 'my-app'
});
```

Q: What data sources are supported?

A:

Category	Sources
Infrastructure	AWS CloudWatch, Azure Monitor, GCP Stackdriver, Prometheus
Applications	OpenTelemetry, StatsD, custom SDKs
Logs	Fluent Bit, Fluentd, Logstash, syslog
Traces	OpenTelemetry, Jaeger, Zipkin
Databases	PostgreSQL, MySQL, MongoDB (query metrics)
Cloud	AWS, Azure, GCP native integrations

Metrics

Q: How do I create a custom metric?

A:

Using SDK:

```
datalens.metrics.gauge('api.response_time', 150, {
  endpoint: '/users',
  method: 'GET'
});

datalens.metrics.counter('api.requests', 1, {
  status: '200'
});
```

Using StatsD:

```
echo "api.request.count:1|c" | nc -u localhost 8125
```

Q: What's the data retention for metrics?

A:

Plan	Full Resolution	Downsampled
Starter	7 days	30 days
Professional	30 days	1 year
Enterprise	90 days	3 years

Downsampled data uses 1-hour resolution.

Q: How do I query metrics?

A: Use our query language (DQL):

```
-- Average CPU by host
SELECT avg(cpu.usage)
FROM metrics
WHERE service = 'api'
GROUP BY host
SINCE 1h

-- 95th percentile latency
SELECT percentile(http.latency, 95)
FROM metrics
WHERE environment = 'production'
SINCE 24h
INTERVAL 5m
```

Logs

Q: How do I search logs?

A: Use the log search bar or query:

```
level:error service:api message:"timeout"
```

Search operators: - `field:value` - Exact match - `field:*pattern*` - Wildcard - `field:[1 TO 100]` - Range - `AND`, `OR`, `NOT` - Boolean

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Q: Can I set up log-based alerts?

A: Yes:

```yaml
alert:
  name: error-rate-high
  type: log
  query: level:error service:api
  condition:
    threshold: 100
    window: 5m
  actions:
    - type: slack
      channel: "#alerts"
```

Q: How long are logs retained?

A:

Plan	Hot Storage	Cold Storage
Starter	3 days	14 days
Professional	15 days	90 days
Enterprise	30 days	1 year+

Hot storage = fast search. Cold storage = archived, slower retrieval.

Tracing

Q: How do I enable distributed tracing?

A: Add the OpenTelemetry SDK:

```
const { NodeTracerProvider } = require('@opentelemetry/node');
const { DataLensExporter } = require('@novatech/datalens-otel');

const provider = new NodeTracerProvider();
provider.addSpanProcessor(
  new BatchSpanProcessor(new DataLensExporter({
    apiKey: process.env.DATALENS_API_KEY
  }))
);
provider.register();
```

Q: How do I trace across services?

A: Context propagates automatically with supported frameworks. For custom propagation:

```
const { propagation, context } = require('@opentelemetry/api');

// Inject into outgoing request
propagation.inject(context.active(), headers);

// Extract from incoming request
const ctx = propagation.extract(context.active(), headers);
```

Q: What's the trace sampling rate?

A: Default: 10% (configurable)

```
tracing:
  sampling:
    rate: 0.1  # 10%
    # Or use adaptive sampling
    adaptive:
      target_rate: 100  # traces per second
```

Dashboards

Q: How do I create a dashboard?

A:

1. Go to **DataLens → Dashboards → New**
2. Add widgets (graphs, stats, tables)
3. Configure queries for each widget
4. Arrange layout
5. Save and share

Q: Can I share dashboards?

A: Yes:

- **Internal sharing:** Add team members as viewers/editors
- **Public link:** Create read-only shareable link
- **Embed:** Generate iframe embed code
- **Export:** PDF or PNG snapshot

Q: Are there pre-built dashboards?

A: Yes! Templates available:

- Kubernetes Overview
- AWS Infrastructure
- Application Performance
- Database Monitoring
- Business Metrics

Go to **Dashboards → Templates** to import.

Alerting

Q: How do I create an alert?

A:

UI: 1. Go to **Alerts** → **New Alert** 2. Define query and threshold 3. Set notification channels 4. Configure schedule

YAML:

```yaml
alert:
  name: high-latency
  query: |
    SELECT avg(http.latency) FROM metrics
    WHERE service = 'api'
  condition:
    operator: ">"
    threshold: 500
    duration: 5m
  notifications:
    - type: pagerduty
      severity: high
```

Q: What notification channels are supported?

A:

Channel	Setup Required
Email	Built-in
Slack	Workspace connection
PagerDuty	Integration key
OpsGenie	Integration key
Webhook	URL configuration
Microsoft Teams	Connector URL

Q: How do I avoid alert fatigue?

A: Best practices:

1. **Use appropriate thresholds** - Alert on business impact
2. **Add duration requirements** - Avoid transient spikes
3. **Group related alerts** - Reduce noise
4. **Use severity levels** - Page only for critical
5. **Enable auto-resolve** - Clear when condition ends

Natural Language Queries (Beta)

Q: How do I use natural language queries?

A: Just type your question:

```
"What caused errors to spike yesterday at 3pm?"
"Show me the slowest endpoints this week"
"Compare today's traffic to last Tuesday"
```

Q: How accurate is NLQ?

A: Current accuracy: ~85% for common queries. The system: - Shows confidence level - Displays interpreted query - Allows query refinement

If results seem wrong, click "Show query" to verify interpretation.

Pricing

Q: How is DataLens billed?

A:

Component	Unit
Metrics	Per million data points/month
Logs	Per GB ingested
Traces	Per million spans
Retention	Additional for extended

Check usage at **Settings → Usage & Billing**.

Q: What's included in each plan?

A:

Feature	Starter	Professional	Enterprise
Metrics	10M/mo	100M/mo	Unlimited
Logs	10 GB/mo	100 GB/mo	Unlimited
Traces	1M/mo	10M/mo	Unlimited
Users	5	25	Unlimited
Dashboards	10	Unlimited	Unlimited
Alerts	10	100	Unlimited
NLQ	No	Yes	Yes

Troubleshooting

Q: Data not appearing in DataLens?

A: Check: 1. API key is valid 2. Data is being sent (check logs) 3. Time range is correct 4. Data retention hasn't expired

Debug:

```
curl -X POST https://ingest.datalens.novatech.com/api/v1/test \
  -H "Authorization: Bearer $DATALENS_API_KEY"
```

Q: Dashboard is slow?

A:

1. Reduce time range
2. Add filters to queries
3. Use appropriate aggregations
4. Reduce widget count
5. Enable caching

Q: Alerts not firing?

A: Verify: 1. Alert is enabled 2. Query returns data 3. Threshold is appropriate 4. Notification channel is configured

Test with: **Alerts** → **[Your Alert]** → **Test**

Integration

Q: Does DataLens integrate with CloudForge?

A: Yes! Native integration: - Automatic metric collection - Environment health dashboards - Deployment annotations - Cost metrics

Enable in CloudForge: **Settings** → **Integrations** → **DataLens**

Q: Can I export data from DataLens?

A:

```
# Export metrics
datalens export metrics \
  --query "SELECT * FROM metrics WHERE service='api'" \
  --format csv \
  --output metrics.csv

# Export to S3
datalens export metrics \
  --query "SELECT * FROM metrics" \
  --destination s3://my-bucket/exports/
```

Contact

- **Documentation:** docs.novatech.com/datalens
- **Support:** support@novatech.com
- **Slack:** #datalens-help

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