# Alibaba Cloud

Tracing Analysis Quick Start

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C-J Alibaba Cloud

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### **Document conventions**

| Style           | Description  | Example  |
|-----------------|--|--|
| <u>↑</u> Danger | A danger notice indicates a situation that<br>will cause major system changes, faults,<br>physical injuries, and other adverse<br>results. | Danger:<br>Resetting will result in the loss of user<br>configuration data.  |
| O Warning       | A warning notice indicates a situation<br>that may cause major system changes,<br>faults, physical injuries, and other adverse<br>results. | Warning:<br>Restarting will cause business<br>interruption. About 10 minutes are<br>required to restart an instance. |
| C) Notice       | A caution notice indicates warning<br>information, supplementary instructions,<br>and other content that the user must<br>understand.      | Notice:<br>If the weight is set to 0, the server no<br>longer receives new requests.                                 |
| ? Note          | A note indicates supplemental instructions, best practices, tips, and other content.   | Note: You can use Ctrl + A to select all files.  |
| >               | Closing angle brackets are used to indicate a multi-level menu cascade.  | Click Settings> Network> Set network<br>type.  |
| Bold            | Bold formatting is used for buttons ,<br>menus, page names, and other UI<br>elements.  | Click OK.  |
| Courier font    | Courier font is used for commands  | Run the cd /d C:/window command to enter the Windows system folder.  |
| Italic          | Italic formatting is used for parameters and variables.  | bae log listinstanceid<br>Instance_ID  |
| [] or [a b]     | This format is used for an optional value, where only one item can be selected.  | ipconfig [-all -t]   |
| {} or {a b}     | This format is used for a required value, where only one item can be selected.   | switch {active stand}  |

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## 1.Quick start to link tracking

This topic uses a Java application as an example to describe how to connect the Java application to tracing analysis, from activating tracing analysis, granting necessary permissions on ECS instances, and connecting the application to tracing analysis, helping you quickly get started with tracing analysis.

#### Prerequisites

- Enable link tracking
- Activate log service
- Activate access control

### Authorize Tracinng Analysis to read and write your log service data

- 1. Log on Link tracing console.
- 2. In **Overview** Page, click **Authorization** to authorize Tracing Analysis to read and write your log service.
- 3. In Cloud resource access authorization, select the required permissions and click Agree to authorize.

| Cloud Resource Access Authorization  |   |
|--|---|
| Note: If you need to modify role permissions, please go to the RAM Console. Role Management. If you do not configure it correctly, the following role: XTrace will not be able to obtain the required permissions. | × |
| XTrace needs your permission to access your cloud resources.<br>Authorize XTrace to use the following roles to access your cloud resources.  |   |
| AliyunXTraceAccessingLogRole<br>Description: The Tracing Analysis will use this role to access your resources in other services.<br>Permission Description: The policy for AliyunXTraceAccessingLogRole.           | ~ |
| Confirm Authorization Policy Cancel  |   |

### Use the Jaeger client to report Java application data

This topic describes how to use the Jaeger client to report data to a Java application as an example. For more information about how to use other clients to report data and applications using other languages, see the documentation at the end of this topic.

- 1. Download the Demo project, go to the manualDemo directory, and run the program following the instructions in Readme.
- 2. Open the pom. xml file and add the dependency on the Jaeger client.

| <dependency></dependency>              |
|--|
| <groupid>io.jaegertracing</groupid>    |
| <artifactid>jaeger-client</artifactid> |
| <version>0.31.0</version>              |
|  |

3. Configure initialization parameters and create a Tracer object.

A Tracer object can be used to create spans to record distributed operation times, transparently transmit data across machines using the Extract/Inject method, or set the current Span. The Tracer object is also configured with data such as the gateway address, local IP address, sample rate, and service name. You can adjust the sample rate to reduce the overhead due to upstream data.

(?) Note I should be grateful if you would have <endpoint> replaces the link trace console cluster setup page of the respective client and region of the access point.

// Replace manualDemo with the name of your application io.jaegertracing.Configuration config = n
ew io.jaegertracing.Configuration("manualDemo"); io.jaegertracing.Configuration.SenderConfiguratio
n sender = new io.jaegertracing.Configuration.SenderConfiguration(); // replace manualDemo with the
<endpoint> name of the application that is sent by the access point of the corresponding client and regi
on on the overview page of the console. withEndpoint("<endpoint>"); config.withSampler(new io.jaege
rtracing.Configuration.SamplerConfiguration().withType("const").withParam(1)); config.withReporter
(new io.jaegertracing.Configuration.ReporterConfiguration().withSender(sender).withMaxQueueSize(
10000)); GlobalTracer.register(config.getTracer());

4. Record request data.

Tracer tracer = GlobalTracer.get(); // Create a Span Span span = tracer.buildSpan("parentSpan").withTag("myTag", "spanFir st").start(); tracer.scopeManager().activate(span, false); tracer.activeSpan().setTag("methodName", "testTracing"); // Business logic secondBiz(); span.finish();

5. After two to three minutes, log on to the . Tracing Analysis console . View the reported Tracing data on the **applications** page.

#### What's next

After reporting application data to the tracing analysis console, you can perform the following operations:

- View key application performance metrics and topology
- View application details
- View API usage
- View SQL performance analysis
- Manage apps and tags