



# Analyzed Fields

## Overview

Selected fields in the analytics data are "analyzed". Analysis consists of tokenizing a block of text into individual terms suitable for use in an inverted index and normalizing these terms into a standard form to improve their searchability. The ADQL [Comparison Operators](#) behave differently for analyzed and non-analyzed fields. To construct queries on analyzed fields, you need to understand some concepts about how the tokens are built.

Uppercase letters in analyzed fields are all converted to lowercase to build tokens.

Delimiters and other factors (such as CamelCase terms) affect how strings are tokenized. For a string such as "myname@company.com", "@" is a delimiter, therefore myname and company.com are two separate tokens. Additionally, company.com is two separate tokens. Note that all non-alphanumeric characters are delimiters. A term that uses CamelCase, such as VicePresident, is tokenized into separate tokens based on recognition of the CamelCase nature of the term resulting in the tokens: Vice and President as well as VicePresident.

For an example string such as: <VicePresident:SalesAndMarketing> - EMEAAustraliaUSA94107, the tokens generated include the following:

- vicepresident
- vice
- president
- salesandmarketing
- sales
- and
- marketing
- emeaaustraliausa94107
- emeaaustraliausa
- emea
- australia
- usa
- 94107

## Analytics Analyzed Fields

The analyzed fields in analytics events are the following:

- **Logs:** Message
- **Transactions:** Errors and Error Detail
- **Mobile:** stacktrace

## Queries on Analyzed Fields

Full-text search is supported on analyzed fields, including the message field for logs, using the **LIKE** operator. See [Comparison Operators](#) for details on using **LIKE**.

On analyzed fields, the **REGEXP** operator matches exactly only the analyzed and processed tokens, so you cannot query across the complete message.

Consider this log message:

```
[2016-06-09 06:07:50,118] [INFO ] [org.springframework.jms.listener.DefaultMessageListenerContainer#0-1] [com.appdynamics.provision.OrderMessageListener] [AD_REQUEST_GUID[2b8ce807-986c-45f9-a5b4-2fe5a6fd90f3]] Received a message to process the order Order_3138 for the user myname@company.com
```

In this log message, myname and company.com are two separate tokens because "@" is a delimiter. To search a log message like this for results based on the email address requires searching across tokens.

