Table of contents

Message format

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A ctrlX CORE log is shown as follows in the *journald* by default:

```
<Time stamp>|<User ID>|<Main diagnostic number>|<Main diagnostic text>|<Detailed diagnostic number>|<Detailed diagnostic text>|<Entity>|<Origin>|<Unit name>|<File name>|<Function name>|<Line number>|<Dynamic description>
```

The individual elements are separated by pipes (|).

Explanation of the elements and specification about its use in diagnostics and trace

Element	Meaning	Use in diagnostics	Use in trace
<Time stamp>	Time stamp when issuing the log in the ctrlX CORE diagnostic system acc. to ISO 8601. Format: "yyyy-mm-ddThh:mm:ss.microsZ" with micros = microseconds.	Optional	Optional
<User ID>	Unique user ID. This element is only filled in case of user-relevant and security-relevant logs.	Optional	Never
<Main diagnostic number>	Unique 32 bit number	Always	Always
<Main diagnostic text>	Short text describing the meaning of the main diagnostic number. The exact meaning of the main diagnostic number is described in detail in the documentation of the respective diagnostic number.	Always	Always

Element	Meaning	Use in diagnostics	Use in trace
<Detailed diagnostic number>	Unique 32 bit number. This number directly refers to the main diagnostic number.	Optional	Never
<Detailed diagnostic text>	Short text describing the meaning of the detailed diagnostic number. The exact meaning of the detailed diagnostic number is described in detail in the documentation of the respective diagnostic number.	Optional	Never
<Entity>	Entity/resource. Example: This corresponds to the system URI of the Data Layer address if the resource is provided with a respective address.	Optional	Optional
<Origin>	Name of the application. Specification: This corresponds to the snap name if the application is a snap.	Optional	Optional
<Unit name>	Name of the respective unit (bundle/component).	Optional	Always
<File name>	Name of the file in which the log entry is issued.	Optional	Optional
<Function name>	Name of the function in which the log entry is issued. The name is output with namespaces if required.	Optional	Optional
<Line number>	Line number at which the log entry is issued.	Optional	Optional
<Dynamic description>	Additional log description that can be output in dynamic elements. The recommended language is English. I18n (multilingualism) does not affect this text. It remains in the language issued.	Optional	Optional

Example of a diagnostic log:

```
2020-07-31T19:10:42.123456Z|101|080F0100|Error in diagnosis system|00666006|Main
diagnosis code is not registered|diagnosis/set|rexroth-automationcore|common.log.diag
nosis|handler.cpp|logThread|600|Not registered main diagnosis code 0x080F01FFF
```

Example of a trace log:

```
2020-07-31T19:10:42.123456Z||080A0112|Trace common message|||trace|rexroth-auto
mationcore|common.log.trace|manager.cpp|setEnablingStateTraceUnit|211|Set enabling
state for trace unit 'common.log.diagnosis' (Messages: true, warnings: true, errors: true).
```