Epiroc

Certiq API Guide

Overview

This is an introductory document of the Certiq APIs (Application Programming Interface). After reading this document, the reader may expect to understand the following:

- What are the Certiq APIs?
- What are they used for?
- How to register?
- How to access?
- What are the API limits?

Introduction to the Certiq System

The Certiq system is a wireless communication system that collects and processes vital data from the Epiroc machines and transmits it to the Certiq central server for presentation and further analysis.

The Certiq system has the following components:

- Certiq hardware and On-board computer
- Data carrier
- Central storage server
- Certiq web portal
- Certiq APIs
- Gateways (services and web application implementing a SOAP API)

The prime functions of the Certiq system are to collect, transfer, store and display the production data of the Epiroc machines. The production data of the Epiroc machines is displayed on the Certiq Web Portal. In addition, Certiq APIs (Certiq Application Programming Interface) are made available to make the production data consumable by the third-party applications.
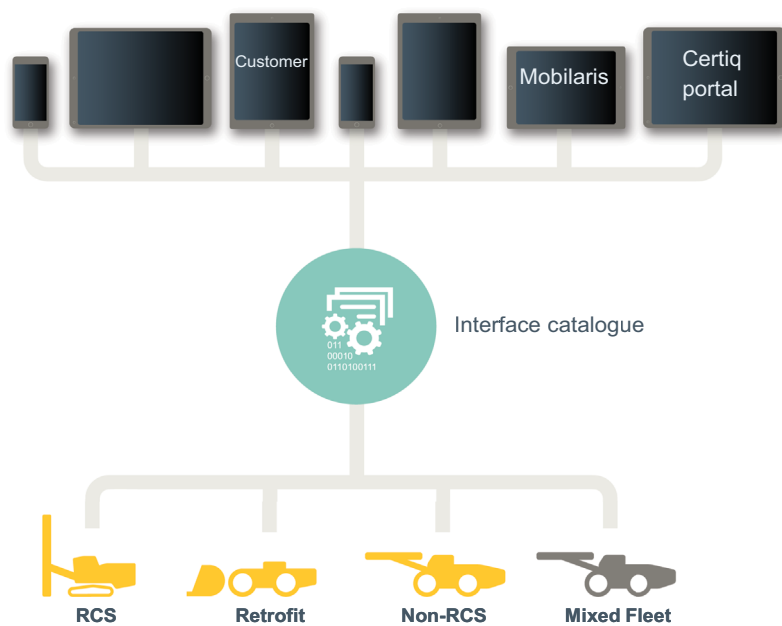
Introduction to the Certiq APIs

An Application Programming Interface (API) is broadly defined as an interface that enables two products to communicate with each other. It allows one product to talk to another by giving an controlled access to its data.

Every working system has an unique ecosystem of different IT solutions. While integrating a new product in an already running system, the APIs play a vital role of providing means to integrate the data of new product into the existing system.

Similarly, the Certiq APIs help in integrating the Epiroc machines with third-party consumer applications. The Certiq APIs enable these consumer applications to retrieve the Epiroc machine data and integrate the same into their system.

The Certiq APIs are designed around SOAP principles (Simple Object Access Protocol) and support the XML (Extensible Markup Language) format for data exchange and SSL (Secure Sockets Layer) for transport security.

To integrate the Epiroc machine data into third-party consumer application, first step is to connect the Epiroc machine to the Certiq System. The Certiq APIs are published by the Certiq System. Further on, to use the Certiq APIs, the consumer application needs a client program to call them.

At present, the Certiq APIs are built on the Epiroc cloud platform. The data that is made available through the Certiq APIs is similar to the Certiq Web Portal data.

A testing environment is made available by means of demo machines and staging server. The staging server receives production data every day and the same can be used for all testing purposes.

The following machine information can be accessed through the Certiq APIs:

- Production figures
- Alarms
- Service information
- Machine details

Getting Started

To be able to view and use the Certiq APIs, access to the following portals are required:

1. Certiq Web Portal.
    I.   The consumer will need to contact the local Epiroc representative and request for the user credentials.
    II. The login credentials are communicated to the consumer via official email ID.

    Note: Make sure that the machine whose data is to be fetched is connected to the Certiq System.

2. Epiroc Developer Portal.
    I.   The consumer will need to contact the local Epiroc representative and request an access to the Epiroc Developer Portal.
    II. Access confirmation and login credentials are communicated to the consumer via official email ID.

Viewing the Certiq APIs

To get started using the Certiq APIs, refer to the Epiroc Developer Portal that presents a collection of the Certiq APIs. Follow the steps provided below to logon to the portal and view the available Certiq APIs:

1. Access the following link using an internet browser:

    https://developer.epiroc.com

    The following screen will appear:

2. Click **SIGN IN**.

Log on to the portal using the assigned credentials.

3. With a successful login to the Epiroc Developer Portal, customer can view the list of the Certiq APIs along with its specifications and respective code examples.

Authentication and Access Requirements

Follow the steps to authenticate and access the Certiq APIs:

1. Log in to the developer portal.
2. To avail a new User Code Token, raise a request to the Authentication Web Service.

   Note: Use the Certiq Web Portal credentials for the authentication process.

3. A successful authentication will return a User Code Token. This token is valid for 24 hours. After 24 hours, a new token is required. The token validity needs to be checked periodically. If the token is not valid for more than one hour, a new token should be requested.

4. To call the Certiq APIs, the requests that are sent by the client program need to contain the User Code Token as part of a basic authentication model.

   Note: Limited number of access to an API per hour and per User Code Token is allowed. Typically 1000 accesses per day. The access count is calculated per access regardless of the method and the API used.

Document Version

Part number	Application list
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Revision History

Issue	Date	Change
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Subject to alteration without prior notice.