



# CORONA WARN-APP

Documentation of data appearing in Corona-Warn-App Dashboard

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# 1. Introduction

The Corona-Warn-App (CWA) dashboard provides an overview of the different topics related to CWA:

- Corona Tests Results
- Download Numbers
- Privacy Preserving Analytics
- Sharing Behavior

This document's purpose is it to provide information about the structure of the data and the content of the columns appearing in the relevant CSV file exports.

It is possible to export each topic individually or to export all data in one csv, depending on which download link is used. Nevertheless, this document includes the description of all possible data.

## 2. Basic information

### 2.1. Meaning of suffixes

Each data content has four specific suffixes, which give different information about the content of the column. The suffixes are used for each data content and will be described in this section.

Suffix	Description	Structure of Data
*_daily	The data has been collected on or for the corresponding effective_date	Type: integer / long
*_cumulated	The cumulative sum of data that have been collected from the beginning of the pandemic until the date specified in column effective_date.	Type: integer / long
*_7days_sum	The sum of the last 7 days of the _daily values. The last 7 days are based on the effective_date, i.e. from effective_date to effective_date - 6 days.	Type: long / double
*_7days_avg	The moving average of the _daily value with a window size of 7 days.	Type: double

### 2.2. Time related contents

The following columns appear in all exports and provide general time related information regarding the data content:

	Description	Structure of Data
<b>update timestamp</b>	The latest timestamp, on which the exported dataset is updated	Type: datetime Format: yyyy-MM-dd'T'HH:mm:ss,SSS Example: 2021-03-10T05:21:38,489
<b>effective_date</b>	The calendar date, on which the data are valid	Type: date Format: yyyy-MM-dd Example: 2021-02-25, 2021-09-121

## 3. Testresults Data

### 3.1. Introduction

Corona test centers can upload the result of a Corona Test on the app and let the user know if the result is positive or negative.

The data, which can be extracted, include information about:

- Number of uploaded tests
- Number of positive, negative or invalid tests

### 3.2. Basic Data Information

<b>Data Contents</b>	Rapid Antigen Tests (RAT) Polymerase Chain Reaction Tests (PCR) Sum of RAT and PCR
<b>Data availability</b>	RAT 24.05.2021 PCR 28.07.2020

### 3.3. Description of Columns

Prefix	Description	Columns derived
<b>tests_total</b>	Number of corona tests that are received by CWA on effective_date.	tests_total_daily tests_total_cumulated tests_total_7days_avg tests_total_7days_sum
<b>tests_pcr_total</b>	Number of PCR tests that are received by CWA on effective_date.	tests_pcr_total_daily tests_pcr_total_cumulated tests_pcr_total_7days_avg tests_pcr_total_7days_sum
<b>tests_pcr_positive</b>	Number of PCR tests with a positive result that are received by CWA on effective_date.	tests_pcr_positive_daily tests_pcr_positive_cumulated tests_pcr_positive_7days_avg tests_pcr_positive_7days_sum
<b>tests_pcr_negative</b>	Number of PCR tests with a negative result that are received by CWA on effective_date.	tests_pcr_negative_daily tests_pcr_negative_cumulated tests_pcr_negative_7days_avg tests_pcr_negative_7days_sum
<b>tests_pcr_invalide</b>	Number of PCR tests with an invalid result that are received by CWA on effective_date.	tests_pcr_invalide_daily tests_pcr_invalide_cumulated tests_pcr_invalide_7days_avg tests_pcr_invalide_7days_sum
<b>tests_rat_total</b>	Number of RAT tests that are received by CWA on effective_date.	tests_rat_total_daily tests_rat_total_cumulated tests_rat_total_7days_avg tests_rat_total_7days_sum
<b>tests_rat_positive</b>	Number of RAT tests with a positive result that are received by CWA on effective_date.	tests_rat_positive_daily tests_rat_positive_cumulated tests_rat_positive_7days_avg tests_rat_positive_7days_sum
<b>tests_rat_negative</b>	Number of RAT tests with a negative result that are received by CWA on effective_date.	tests_rat_negative_daily tests_rat_negative_cumulated tests_rat_negative_7days_avg tests_rat_negative_7days_sum
<b>tests_rat_invalide</b>	Number of RAT tests with an invalid result that are received by CWA on effective_date.	tests_rat_invalide_daily tests_rat_invalide_cumulated tests_rat_invalide_7days_avg tests_rat_invalide_7days_sum

## 4. Privacy Preserving Analytics Data

### 4.1. Introduction

The privacy preserving analytics data is extracted from the data which is provided by users via the data donation of CWA.

The data, which can be extracted, includes information about

- Number of generated warnings
- Number of generated red and green warnings

### 4.2. Basic Data Information

<b>Data Contents</b>	Warnings which are obtained via data donation in CWA
<b>Data availability</b>	06.03.2021
<b>Additional Information</b>	<p>A warning can be a</p> <ul style="list-style-type: none"> <li>• Bluetooth based warning</li> <li>• Check-in based warning</li> <li>• Bluetooth based warning and Check-in based warning</li> </ul>

### 4.3. Description of Columns

<b>Prefix</b>	<b>Description</b>	<b>Columns derived</b>
<b>ppa_total_warnings</b>	Numbers of total warnings which were generated by CWA and received by users who are sharing their data. It is calculated by adding ppa_risk_red_daily + ppa_risk_green_daily	ppa_total_warnings_daily ppa_total_warnings_cumulated ppa_total_warnings_7days_sum ppa_total_warnings_7days_avg
<b>ppa_risk_red</b>	Numbers of red risk warnings which were generated by CWA and received by users who are sharing their data.	ppa_risk_red_daily ppa_risk_red_cumulated ppa_risk_red_7days_sum ppa_risk_red_7days_avg
<b>ppa_risk_green</b>	Numbers of green risk warnings which were generated by CWA and received by users who are sharing their data.	ppa_risk_green_daily ppa_risk_green_cumulated ppa_risk_green_7days_sum ppa_risk_green_7days_avg

## 5. Download Data

### 5.1. Introduction

The data, which can be extracted, includes information about

- Number of app downloads
- Number of app downloads per Operation system (Android and iOS)

### 5.2. Basic Data Information

<b>Data Contents</b>	Android iOS Sum of Android and iOS
<b>Data availability</b>	Android 15.06.2020 iOS 16.06.2020
<b>Additional Information</b>	Because of the high data privacy of the app, it is not possible to draw any conclusions on the number of active users from the download numbers.

### 5.3. Description of Columns

Prefix	Description	Columns derived
<b>app_downloads</b>	Number of downloads per user account on effective_date. <sup>1</sup>	app_downloads_daily app_downloads_cumulated app_downloads_7days_sum app_downloads_7days_avg
<b>app_downloads_android</b>	Number of downloads per user account from Google Play Store (Android) on effective_date.	app_downloads_android_daily app_downloads_android_cumulated app_downloads_android_7days_avg app_downloads_android_7days_sum
<b>app_downloads_ios</b>	Number of downloads per user account from App Store (iOS) on effective_date.	app_downloads_ios_daily app_downloads_ios_cumulated app_downloads_ios_7days_sum app_downloads_ios_7days_avg

<sup>1</sup>: multiple Downloads from the same user account on the same day is only counted once.

## 6. Testresults Sharing Data

### 6.1. Introduction

For the interruption of infection chains only positive test results are relevant. Positive test results must be verified either through QR Code or teleTANs or use the self report submission function. If the result is positive and the test is verified inside of the app, users can than decide, if they want to share their result and warn their contacts.

The QR Code is handed to the user when the test is taken. The QR Code is scanned by the app and the test result is uploaded as soon as it is known.

The teleTAN is received by calling the Verification-Hotline. The generated tan can be used to register the test in the app. A teleTAN is only valid for 1 hour, after that a new one must be generated.

The Self Report Submission is a possibility to share an unverified test inside of the app.

### 6.2. Basic Data Information

<b>Data Contents</b>	QR Code teleTAN Sum of QR Code and teleTAN
<b>Data availability</b>	01.09.2020

### 6.3. Description of Columns

Prefix	Description	Columns derived
<b>qr_redeemable</b>	A QR Code is defined to be redeemable if it is both scanned and has an associated positive test result. effective_date refers here to the date on which the QR code was scanned. This number can be corrected after published.	qr_redeemable_daily qr_redeemable_cumulated qr_redeemable_7days_avg qr_redeemable_7days_sum
<b>qr_redeemed</b>	Number of QR codes which are redeemable and then actually get redeemed for the given effective_date. This number can be corrected after published.	qr_redeemed_daily qr_redeemed_cumulated qr_redeemed_7days_avg qr_redeemed_7days_sum
<b>qr_not_redeemed</b>	Number of QR codes which are redeemable for the given effective_date but still not redeemed.	qr_not_redeemed_daily qr_not_redeemed_cumulated qr_not_redeemed_7days_avg qr_not_redeemed_7days_sum
<b>teletan_redeemable</b>	Number of Tele-Tans issued on the given effective_date.	teletan_redeemable_daily teletan_redeemable_cumulated teletan_redeemable_7days_avg teletan_redeemable_7days_sum
<b>teletan_redeemed</b>	Number of redeemable Tele-Tans generated on effective_date and that are redeemed.	teletan_redeemed_daily teletan_redeemed_cumulated teletan_redeemed_7days_avg teletan_redeemed_7days_sum
<b>teletan_not_redeemed</b>	Number of Tele-Tans that are not redeemed on effective_date	teletan_not_redeemed_daily teletan_not_redeemed_cumulated teletan_not_redeemed_7days_avg teletan_not_redeemed_7days_sum
<b>qr_teletan_redeemable</b>	Total number of redeemable QR-Codes and Tele-Tans on effective_date. This number can be corrected after published.	qr_teletan_redeemable_daily qr_teletan_redeemable_cumulated qr_teletan_redeemable_7days_avg qr_teletan_redeemable_7days_sum

<b>ppa_srs_total_tests</b>	Total Number of SRS results	ppa_srs_total_tests_daily ppa_srs_total_tests_cumulated ppa_srs_total_tests_7days_avg ppa_srs_total_tests_7days_sum
<b>ppa_srs_other</b>	Number of SRS results, where there is no Test type chosen.	ppa_srs_other_daily ppa_srs_other_cumulated ppa_srs_other_7days_avg ppa_srs_other_7days_sum
<b>ppa_srs_self_test</b>	Number of SRS results, where the test type is “self test”	ppa_srs_self_test_daily ppa_srs_self_test_cumulated ppa_srs_self_test_7days_avg ppa_srs_self_test_7days_sum
<b>ppa_srs_registered_tests</b>	Number of SRS results where the test type is either “registered PCR” or “registered RAT”	ppa_srs_registered_tests_daily ppa_srs_registered_tests_cumulated ppa_srs_registered_tests_7days_avg ppa_srs_registered_tests_7days_sum
<b>ppa_srs_unregistered_tests</b>	Number of SRS results where the test type is either “unregistered PCR” or “unregistered RAT”	ppa_srs_unregistered_tests_daily ppa_srs_unregistered_tests_cumulated ppa_srs_unregistered_tests_7days_avg ppa_srs_unregistered_tests_7days_sum