

Article

Data Completeness and Corrections

Understand how the Analytics Reports API provides complete data sets.

Overview

The Analytics Reports framework delivers new portions of report content as instances. Each instance can contain one or more batches of data, to accommodate late-arriving events, or in rare cases, data corrections. Each data batch has a start date, represented by the `Date` column, and a length of time, represented by `granularity` of the instance. `processingDate` is the date when Apple creates a new report instance.

These reports use this data completeness approach:

- [AirPlay Errors](#)
- [AirPlay Performance](#)
- [App Clip Usage](#)
- [App Crashes](#)
- [App Installs Performance](#)
- [App Sessions](#)
- [App Store Discovery and Engagement](#)
- [App Store Downloads](#)
- [App Store Installations and Deletions](#)
- [App Store Opt-in](#)
- [App Store Pre-orders](#)
- [App Store Purchases](#)

- [App Store Web Preview](#)
- [Browser Choice Screen Engagement \(iOS versions before 18.2\)](#)
- [Platform App Installs](#)
- [Streaming Downloads Performance](#)
- [Streaming Playback Performance](#)

Note

For reports not listed here, see the Completeness section in each report.

For example, if you review a report instance with *daily* granularity and a `processingDate` of `2024-04-01`, you might find that the `Date` column contains multiple dates, going back as far as the completeness threshold for that report. In this case you might find records with `2024-03-31` and `2024-03-30` in the `Date` column, and possibly more.

Instances from a more recent `processingDate` overwrite instances with an earlier `processingDate`. The report instance with a `processingDate` of `2024-04-01` overwrites a set of records for a `Date` of `2024-03-30` from a report instance with a `processingDate` of `2024-03-31`. Don't merge records for a `Date` of `2024-03-30` across two report instances to avoid double counting. Use the latest instance.

Alternatively, you can choose to wait until data is finalized (see the Completeness description in the Overview on each report page) and download once.

Note

In rare cases of data corrections, you might receive new record sets for a date in the past, beyond the completeness threshold.

Platforms

In reports with data from iPad, the `Device` column shows `iPad`, and the `Platform version` column shows `iOS` with the corresponding version number.

Data completeness for daily, weekly, and monthly reports

In this example the report has a completeness of two days. You can wait 2 days and download final complete daily set of records for Date of 2024-03-30 from the report instance with processing Date of 2024-04-01 and with daily granularity. The Daily, Weekly, and Monthly report tables below show what data you can expect in each processingDate and when you can expect to see complete data sets for a given date.

Note

These are not fields in reports, but descriptions of what you might read in your reports.

Daily Reports

Processing date in API	Date column in report	Completed partition	What you can expect
2024-04-01	2024-03-30	2024-03-30	Full, complete data for events that happened on 3/30.
2024-04-01	2024-03-31	2024-03-30	Full, but not complete, data for events that happened on 3/31.
2024-04-02	2024-03-31	2024-03-31	Full, complete data for events that happened on 3/31.
2024-04-02	2024-04-01	2024-03-31	Full, but not complete, data for events that happened on 4/1.
2024-04-03	2024-04-01	2024-04-01	Full, complete data for events that happened on 4/1.
2024-04-03	2024-04-02	2024-04-01	Full, but not complete, data for events that happened on 4/2.

Weekly Reports


Processing date	Date column in report	Completed partition	What you can expect
2024-04-05	2024-03-25	2024-03-25	Full, complete data for events that happened in week 3/25–3/31.
2024-04-12	2024-04-01	2024-04-01	Full, complete data for events that happened in week 4/1–4/7.

Monthly Reports

Processing date	Date column in report	Completed partition	What you can expect
2024-04-05	2024-03-01	2024-03-01	Full, complete data for events that happened in the month of March.
2024-05-05	2024-04-01	2024-04-01	Full, complete data for events that happened in the month of April.

See Also

Essentials

-  Protecting user privacy in report data
- Understand measures that help protect user privacy.