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COUNTER Code of Practice Release 5: Consistency, Clarity, Simplification, and Continuous Maintenance

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Abstract

All academic libraries across the world use and trust COUNTER usage reports to inform renewal and new purchasing decisions, to inform faculty about the value of the library and its resources, and to understand user behavior and improve the user experience. The COUNTER Code of Practice enables content providers to produce consistent, comparable, and credible usage data for their online content. This allows librarians and other interested parties to compare the usage data they receive, and to understand and demonstrate the value of the electronic resources to which they subscribe. In July 2017, COUNTER published Release 5 of the Code of Practice. This new release has several advantages over the previous releases, providing greater flexibility and clarity.

Community Development

The development of the new COUNTER Code of Practice was undertaken by expert volunteers, who formed the Technical Sub-Group. Members of this group are librarians, publishers, vendors, and other service providers in the area of scholarly communication. The group's objective was to seek the balance between addressing changing needs and reducing the complexity of the Code of Practice to ensure that all publishers and content providers can achieve compliance. The Technical Sub-Group devoted hundreds of hours to the design and development of the new release. However, they did not work in isolation but were informed by input from the wider COUNTER community. A first draft of the Code of Practice was published in January 2017, and during a 72-day consultation period COUNTER sought input through surveys, webinars, and face-to-face meetings. A revised draft, published in May, reflected the comments and suggestions received. Further responses informed the final Code of Practice, published in July 2017. The result of this community effort is a Code of Practice that is consistent, unambiguous, and flexible. Flexibility is important because it means that the Code of Practice can be adapted and extended as digital publishing changes over the years. The future-proofing built into Release 5 means that it can be subject to a continuous maintenance process, changing over time to stay relevant, instead of being replaced by Release 6.

Master Reports and Standard Views

The foundation of Release 5 is four Master Reports:

- Platform Master Report
- Database Master Report
- Title Master Report
- Item Master Report

These Master Reports cover a wide spectrum of activities and include the complete set of COUNTER metrics supplemented with a variety of attributes. The Master Reports are flexible and enable librarians to filter and configure to create customized views of their usage data.

For ease of use, each Master Report also has one or more preset Standard Views. These are subsets of the information from a Master Report, providing summaries of specific types of activity, such as usage or access denials. The Standard Views cover the most common set of library needs.

Metric Types

COUNTER metric types describe the user activity being counted. There are three groups of metric types: those related to items and titles; those that count search activity; and those that capture access denials.

Title and item usage	Search activity	Access denials (also known as turnaways)
Total_Item_Investigations the total number of times a content item or information related to a content item was accessed. **Unique_Item_Investigations** the number of unique content items (e.g., chapters) investigated by a user. **Unique_Title_Investigations** the number of unique titles (e.g., books) investigated by a user. **Total_Item_Requests** the total number of times the full text of a content item was downloaded or viewed. **Unique_Item_Requests** the number of unique content items (e.g., chapters) requested by a user. **Unique_Title_ Requests** the number of unique titles (e.g., books) requested by a user.	**Searches_Regular** the number of times a user searches a database, where they have actively chosen that database from a list of options OR there is only one database available to search. **Searches_Automated** the number of times a user searches a database, where they have not actively chosen that database from a list of options. **Searches_Platform** the number of times a user performs a search on the platform, regardless of the number of databases involved in the search. **Searches_Federated** the number of times a search is run remotely through an API.	**No_License** counted where a user is unable to access a unique content item because their institution does not have a license to the content. **Limit_Exceeded** counted where a user is unable to access a unique content item because their institution's cap on the number of simultaneous users has been exceeded.

The metric types related to items and titles have two categories: "investigations" and "requests." An "investigation" is intended to measure a user's expression of interest in a content item or title; and a "request" is about the user's access of a content item. As Figure 1 demonstrates, requesting an item is also considered an expression of interest; therefore, access to a content item will be counted as both a request and an investigation.

Attributes

Early releases of the COUNTER Code of Practice focused on usage statistics related to "Journals." That was expanded to "Books," and later "Articles" and "Multimedia Collections" were added. Release 5 further expands the scope of COUNTER into the area of research data and social media. To help organize this increased scope in a single, consistent, and coherent Code of Practice, several new attributes have been added. Attributes ensure the Technical Sub-Group can maintain and amend the Code of Practice over time.

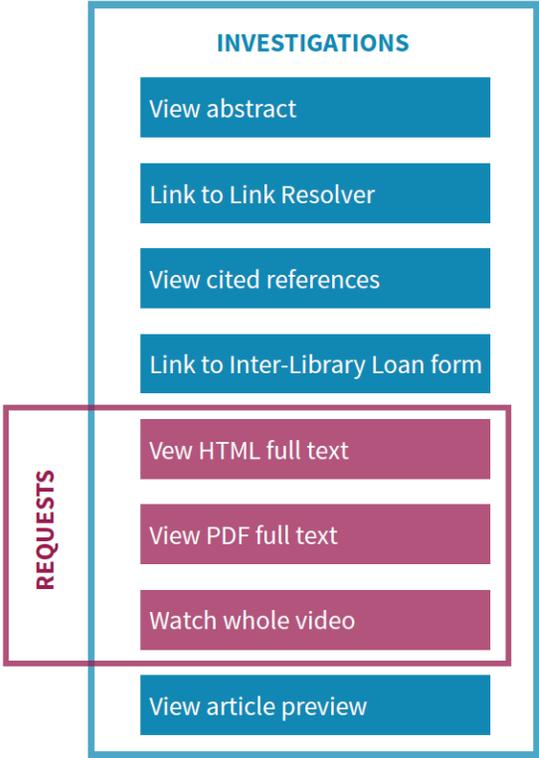**Data_Type** identifies the nature of the material being used. This attribute is used when creating

Figure 1. Investigations and requests.

Standard Views for Books and Journals and is an optional parameter for the Title Master Report and can be used to generate summaries in a Database Master Report or Platform Master Report. The data types are as follows:

- Article
- Book
- Book Segment
- Database
- Dataset
- Journal
- Multimedia
- Newspaper or Newsletter
- Platform
- Other
- Repository Item
- Report
- Thesis or Dissertation

Section_Type is used when content is delivered in "chunks" (sections); this describes what that section is, an article, book, chapter, or section.

Access_Type describes the nature of access control that was in place when the content item was accessed. Its primary role is to differential usage of Gold Open Access content from content that requires a license.

Access_Method indicates whether the usage related to investigations and requests was generated by a human user browsing and searching a website ("regular") or by Text and Data Mining processes (TDM). This applies when a content provider allows TDM of their content and is able to distinguish such activity from all other activity, for example because they have a specific TDM API. The latter may result in massive amounts of content being accessed and it can skew the statistics. Separating this activity allows TDM usage to be measured and still be kept separate from regular usage.

YOP is the year of publication for the content item accessed. If content is available in print and online format and the publication dates of these two formats differ, the year of publication of the version of record (normally the format that is published first) is used.

Reporting

All Release 5 reports are structured the same way to ensure consistency, not only between reports, but also between versions of the reports. Now, all reports share the same format for the header, the report body is derived from the same set of element names, total rows have been eliminated, and data values are consistent between the machine-readable and tabular versions of a report. This addresses the Release 4 problems of terminology and report layouts varying from report to report, as well as SUSHI and tabular versions of the same report producing different results while still being COUNTER- compliant.

SUSHI is the standard protocol, which greatly facilitates the handling of large volumes of usage data, and its implementation by vendors allows the automated retrieval of the COUNTER usage reports into local systems, making this process much less time consuming for the librarian or library consortium administrator. Release 5 supports the next version, COUNTER_SUSHI. This adopts a RESTful interface returning JSON-formatted usage. This is in line with modern Web development, using approaches that are familiar to most Web developers. It also offers a microservice approach that allows usage to be embedded in other applications.

Common Use Cases and Common Questions

Librarians will be able to use Standard View reports to address the most common use cases. For example:

Journal Requests (Excluding OA_Gold) is the standard view for calculating journal cost per use. The report includes only journal usage for licensed content and excludes usage of Gold Open Access articles and usage related to text and data mining. Gold Open Access articles are usually supported financially by the author or the author's funding agency. Librarians want them excluded, so that they can calculate the cost per usage based on only the articles to which they subscribe. This Standard View is essentially equivalent to the counts in COUNTER Release 4 JR1 reports with totals from JR1GOA reports removed.

The key metric in this report is "Unique Item," which helps eliminate the effect different styles of user interface may have on usage counts. If the same article was accessed multiple times in each user session,

the corresponding metric can only increase by 1 to simply indicate that content item was accessed in the session.

Book Requests (Excluding OA_Gold) is a standard view that provides comparable usage statistics for books. It includes book usage for licensed content and excludes usage of Gold Open Access content and usage related to text and data mining.

The key metric in this report is "Unique_Title," which to helps to normalize e-book metrics regardless of the nature of the platform and how e-book content was delivered. E-books can be downloaded as an entire book in a single PDF or as separate chapters. In Release 4, the counts for BR1 (book downloads) and BR2 (section downloads) are not comparable. With the "Unique_Title" metrics, the book title's "Unique_Title" metrics are only increased by 1 no matter how many (or how many times) chapters or sections were accessed in each user session.

Journal Requests by YOP Requests (Excluding OA_Gold) is a standard view that can be used for separating usage of journal back files licensed under a separate license from current content. It includes journals usage for licensed content broken out by Year of Publication (YOP) and excludes usage of Gold Open Access articles and usage related to text and data mining. Librarians can filter resulting reports by title to view usage by YOP or create a pivot table.

Database Search and Item Usage is the standard view for understanding database usage. It includes usage related to searches, requests, and investigations and excludes usage related to text and data mining. Key metric types are Total_Item_Investigations for non–full text databases and Total_Item_Requests for full text databases.

New Approaches

The Technical Sub-Group consulted widely with all stakeholders and met most requirements.

However, certain requirements require innovative approaches. A common request from librarians was the reporting of journal or book titles with zero usage. However, not all content providers are able to include zero usage titles in their reports because the systems used to control access are separate from the systems used to record usage. Therefore, zero usage is not a requirement for COUNTER compliance; but content providers can still include zero usage in their Master Title Report if their systems are capable. COUNTER is encouraging content providers to provide an institution's holdings (what they can access) in the form of a KBART file, and to comply with the recommendations of the NISO KBART-Automation working group when they come out and provide a way to automate the harvesting. COUNTER expects content providers to use the same title identifiers on both reports to facilitate accurate matching. Community-created free tools (such as a simple macro-enabled Excel file) would be able to harvest usage and entitlements from a single content provider and perform the desired analysis with just one click.

Another stakeholder requirement was for library consortium reports. However, due to size, creating and consuming Release 4 consortium reports was not always possible. Methods included in Release 5 simplify the retrieval of any R5 report for all consortium members. COUNTER is committed to facilitate development open source tools that will provide consortium administrators with the ability to generate consolidated usage reports for the consortium.

Implementation and Transition Timelines

To ensure that they remain COUNTER compliant, content providers must be ready by February 2019 to deliver Report 5 reports starting with January 2019 usage. COUNTER is supporting content providers in the implementation of Release 5 through the publication of Friendly Guides, regular webinars, and through its Implementers e-mail forum.