



COUNTER METRICS

Archival Information

Code of Practice Release 1

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The COUNTER Code of Practice: Release 1

Published December 2002

Abstract

COUNTER has been developed to provide a single, international, extendible Code of Practice that allows the usage of online information products and services to be measured in a credible, consistent and compatible way using vendor-generated data. The COUNTER Code of Practice specifies: the data elements to be measured definitions of these data elements; usage report content, format, frequency and methods of delivery; protocols for combining usage reports from direct use and from use via intermediaries. The Code of Practice also provides guidelines for data processing by vendors and auditing protocols. In response to librarian demand, Release 1 of the COUNTER Code of Practice focuses on the usage of journals and databases, the products that account for the largest share of most libraries' materials budgets. Future releases of the Code of Practice will extend the scope of COUNTER, not only to other content types, but also to more detailed levels of reporting for each content type.

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Note: Sections 3, 4, and 5 contain the core information required for implementation of the COUNTER Code of Practice.

Foreword

COUNTER (Counting Online Usage of NeTworked Electronic Resources) was formally established in March 2002. Release 1 of the COUNTER Code of Practice was launched in December 2002. COUNTER serves librarians, vendors and intermediaries by facilitating the recording and exchange of online usage statistics. The COUNTER Code of Practice provides guidance on data elements to be measured, definitions of these data elements, output report content and format, as well as on data processing and auditing. To have their usage statistics and reports designated 'COUNTER-compliant' vendors must provide usage statistics that conform to the Code of Practice.

COUNTER is widely supported by the international community of librarians, publishers and intermediaries, as well as by their professional bodies. This Code of Practice has been developed with the active participation of representatives of all these groups, who are represented on the Executive Committee as well as on the International Advisory Board of COUNTER (See Appendix B).

The following organizations support COUNTER:

- AAP, Association of American Publishers
- ALPSP, The Association of Learned & Professional Society Publishers
- ARL, Association of Research Libraries
- ASA, Association of Subscription Agents and Intermediaries
- BIC/EDItEUR
- JISC, Joint Information Systems Committee
- NCLIS, National Commission on Libraries and Information Science
- NISO, National Information Standards Organization
- PA, The Publishers Association
- STM, International Association of Scientific, Technical & Medical Publishers
- UKSG, United Kingdom Serials Group

COUNTER is deeply grateful to its Founding Sponsors, listed below, whose generous financial contributions have enabled this project to commence its work. We salute their vision, commitment and support.

- AAP/PSP, Association of American Publishers, Professional and Society Publishing Division

- ALPSP, The Association of Learned & Professional Society Publishers
 - ARL, Association of Research Libraries
 - ASA, Association of Subscription Agents and Intermediaries
 - Blackwell Publishing
 - EBSCO
 - Elsevier Science
 - Ingenta
 - Institute of Physics Publishing
 - JISC, Joint Information Systems Committee
 - Lippincott, Williams & Wilkins
 - Nature Publishing Group
 - Oxford University Press
 - PA, The Publishers Association
 - ProQuest
 - STM, International Association of Scientific, Technical & Medical Publishers
 - Taylor & Francis Group
 - UKSG, United Kingdom Serials Group
-

General information

Purpose

The purpose of the COUNTER Code of Practice is to facilitate the recording, exchange and interpretation of online usage data by establishing open, international standards and protocols for the provision of vendor-generated usage statistics that are consistent, credible and compatible. COUNTER builds on a number of important ongoing initiatives, standards and protocols, See Section 8 below.

Scope

The COUNTER Code of Practice provides a framework for the recording and exchange of online usage statistics at an international level. In doing so, it covers the following areas: data elements to be measured; definitions of these data elements; content and format of usage reports; requirements for data processing; requirements for auditing; guidelines to avoid duplicate counting when intermediary gateways and aggregators are used. In response to librarian feedback, Release 1 of the Code of Practice focuses on journals and databases, as there is more general agreement on the data elements to be measured and on their definitions than for other content types. Journals and databases also represent the largest components of most library materials budgets. A wider range of content types and more detailed levels of reporting will be covered as the Code of Practice is upgraded and extended in subsequent releases.

Application

COUNTER is designed for librarians, vendors and intermediaries. The guidelines provided in the Code of Practice enable librarians to compare statistics from different vendors, to make better-informed purchasing decisions, and to plan infrastructure more effectively. COUNTER also provides vendors/intermediaries with the detailed specifications they need to generate data in a format useful to customers, to compare the relative usage of different delivery channels, and to learn more about online usage patterns. COUNTER also provides guidance to others interested in information about online usage statistics.

Strategy

COUNTER is an open Code of Practice that will evolve in response to the demands of the international librarian, publishing and intermediary communities. A conscious decision has been taken to limit Release 1 to providing a set of relatively simple, reliable usage reports for journals and databases, as these are currently the most significant online purchases by libraries. Future releases will be extended horizontally, to cover e-books and other content types, and vertically, to provide more detailed levels of reporting. It is intended that librarians, vendors and other parties should work towards full implementation of Release 1 from the beginning of the 2004 subscription year, giving them one year to adapt their systems and processes. The Code of Practice is kept continually under review and feedback on its scope and application are actively sought from all interested parties. See Section 10 below.

Governance

COUNTER is governed by an Executive Committee, chaired by Richard Gedye of Oxford University Press. The day-to-day management of COUNTER is the responsibility of the Project Director, Peter Shepherd (pshepherd@projectCounter.org). See Section 9 below.

Definitions

Release 1 of the Code of Practice defines those data elements and other terms that are relevant, not only to the usage reports specified in Release 1, but also to other reports that vendors may wish to generate. The list of definitions will expand as the scope of the Code of Practice expands.

Every effort has been made to use existing ISO, NISO, etc. definitions where appropriate, and the source is cited. See Section 3 below.

Versions

There will be only one valid version of the COUNTER Code of Practice at any given time, but different levels of compliance are envisaged (see 2.8 below). The Code of Practice will be upgraded and extended on a regular basis. Each new

version will be made available as a numbered Release on the COUNTER website; users will be alerted to its availability. It is planned that there will be no more than one new Release of the Code of Practice in any given calendar year.

Auditing and COUNTER compliance

From 2004, auditing will be required of each vendor's reports and processes to certify that they are COUNTER compliant. The auditing process will be designed to be simple, straightforward and not to be unduly burdensome or costly to the vendor.

To have their usage reports and data designated 'Release 1 COUNTER-compliant' a vendor must be able to deliver, as a minimum, the Usage Reports defined as 'Level 1' in Section 3, using the definitions defined as 'Level 1' in Section 4. Vendors are, however, encouraged to comply with Level 2 standards in Sections 3 and 4 where possible, as these will allow the vendor to deliver more usable data to customers, and will obtain, for the vendor, a higher level of COUNTER-compliance.

Relationship to other standards, protocols and codes

The COUNTER Code of Practice builds on a number of existing industry initiatives and standards that address vendor-based network performance measures. (See Section 8 below). Where appropriate, definitions of data elements and other terms from these sources have been used in this Code of Practice, and are identified as such in Section 3 below.

Making comments on the Code of Practice

The COUNTER Executive Committee welcomes comments on the Code of Practice. See Section 10 below.

Comments will be accepted for a period of 12 months, January-December 2003, and will be taken into account in the development of subsequent releases of the Code of Practice.

Definitions of terms used

Table 1 below lists the terms used in this Code of Practice, and provides a definition of each term, along with examples where appropriate. In order to be designated compliant with Release 1 of the COUNTER Code of Practice, vendors must adhere to the definitions provided in Table 1. The terms listed in Table 1 are divided into the following broad categories: Page views, session data and market elements.

Page views

Table 1. Definitions of terms used in the COUNTER Code of Practice

#	Term	Examples / formats	Definition
3.1.1	Bibliographic data		
3.1.1.1	Service	Science Direct, Academic Universe, Wiley Interscience	A branded group of online information products from one or more vendors that can be subscribed to/licensed and searched as a complete collection, or at a lower level.
3.1.1.2	Publisher	Wiley, Springer	An organization whose function is to commission, create, collect, validate, host and distribute information online and/or in printed form
3.1.1.3	Imprint	Pergamon	A publisher brand or division, usually dedicated to publishing material within particular specialities and/or in specific formats (e.g. database, journal, etc.)
3.1.1.4	Serial		A publication in any medium issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely. This definition includes periodicals, newspapers, and annuals (reports, yearbooks, etc.); the journals, memoirs, proceeding, transactions, etc. of societies; and numbered monographic series (NISO)
3.1.1.5	Journal	Tetrahedron Letters	A serial that is a branded and continually growing collection of original articles within a particular discipline
3.1.1.6	Issue		A collection of journal articles associated with each other via allocation of a specific issue number and presented as an identifiable unit online and/or as a

			physically bound and covered set of numbered pages in print.
3.1.1.7	Host	Ingenta, HighWire	An intermediary online service which stores items that can be downloaded by the user
3.1.1.8	Gateway	SWETSwise, OCLC ECO	An intermediary online service which does not store the items requested by the user, and which either a) refers these requests to a host or vendor site or service from which the items can be downloaded by the user, or b) requests items from the vendor site or service and delivers them to the user within the gateway environment.
3.1.1.9	Vendor	Wiley, Oxford University Press	A publisher or other online information provider who delivers its own licensed content to the customer and with whom the customer has a contractual relationship
3.1.1.10	Aggregator	ProQuest, Gale, Lexis Nexis	A type of vendor that hosts content from multiple publishers, delivers content direct to customers and is paid for this service by customers
3.1.1.11	Database	Social Science Abstracts	A collection of electronically stored data or unit records (facts, bibliographic data, texts) with a common user interface and software for the retrieval and manipulation of data (NISO)
3.1.1.12	Print ISSN	Free text format (up to 13 characters in future)	Unique International Standard Serial Number assigned to the print version of a journal by the national ISSN agency of the country from which the journal is published
3.1.1.13	Online ISSN	Free text format (up to 13 characters in future)	Unique International Standard Serial Number assigned to the online version of a journal by the national ISSN agency of the country from which the journal is published.
3.1.1.14	DOI (Digital Object Identifier)		The Digital Object Identifier is a means of persistently identifying a piece of intellectual property (a creation) on a digital network, irrespective of its current location (www.doi.org)
3.1.1.15	Volume	Alpha-numeric, no leading zeros	Numbered collection of a minimum of one journal issue; in printed form, volumes of more than one issue are not normally bound together by the publisher, but are frequently bound together in hardback by

			the purchasing library to aid preservation of the printed product.
3.1.1.16	Year		Year in which an article, item, issue or volume is first published in any medium
3.1.1.17	Issue date	dd-mm-yyyy;dd=1, if monthly or less frequent	The date of release by the publisher to customers of a journal issue
3.1.2	Page type		
3.1.2.1	Item	Full text article, TOC, Abstract, Database record	A uniquely identifiable piece of published work that may be original or a digest or a review of other published work. PDF, Postscript and HTML formats of the same full text article (for example), will be counted as separate items.
3.1.2.2	Article		An item of original written work published in a journal or other serial publication. An article is complete in itself, but usually cites other relevant published works in its list of references
3.1.2.3	TOC (Table of Contents)		A list of all articles published in a journal issue
3.1.2.4	Abstract		A short summary of the content of an article, always including its conclusions
3.1.2.5	Article header		That subsection of an article which includes the following information: publisher; journal title, volume, issue and page numbers; copyright information; list of names and affiliations of the authors; author organization addresses; title and abstract (where present) of the article; keywords (where present)
3.1.2.6	Full-text article		The complete text, including all references, figures and tables, of an article, plus links to any supplementary material published with it.
3.1.2.6.1	HTML		Article formatted in HTML so as to be readable by a web browser
3.1.2.6.2	PDF		Article formatted in portable document format so as to be readable via the Adobe Acrobat reader; tends to replicate online the appearance of an article as it would appear in printed page form

3.1.2.6.3	Postscript		Article formatted in Postscript for faithful output via printer
3.1.2.6.4	References		A list of works referred to in an article, giving sufficient detail to enable the identification and location of each work
3.1.2.7	Database record		An individual record in a standard format, the collection of which in a form that can be processed by a computer constitutes a database
3.1.2.8	Search		A specific intellectual query, typically equated to submitting the search form of the online service to the server
3.1.2.9	Item requests		Number of items requested by users. User requests include viewing, downloading, emailing and printing of items, where this activity can be recorded and controlled by the server rather than the browser. Turnaways will also be counted. (See 3.1.5.4)
3.1.2.10	Successful request		For web-server logs successful requests are those with specific return codes, as defined by NCSA
3.1.3	Source of page		
3.1.3.1	Direct from vendor's server		Delivery of content to the user is from the vendor's own service/site, to which the user has direct access.
3.1.3.2	Direct from an aggregator		Delivery of content to the user is from an intermediary (a gateway that is also a host), using its own store of publishers' content. Gateway is responsible for recording and supplying usage statistics for full-text requests direct to the customer and also, where contractually permitted to do so, to the vendor. (In this case the vendor may not add the 'gateway' usage figures to those recording usage of content delivered by the vendor direct to the customer)
3.1.3.3	Referral from an aggregator or gateway		Delivery involves the gateway sending the end user from the gateway's site to the vendor's site for the requested content. Vendor is responsible for recording and supplying full-text usage statistics to the customer. Gateway may also supply usage statistics to the customer, but must report them separately from those covering its delivery of full-text direct to the customer

3.1.3.4	Via a gateway		Delivery of content is via a gateway, which requests the content from the publisher and delivers it to the user in the context of the gateway service. Responsibility for collecting and supplying usage statistics to the customer is the same as in 3.1.3.2 above.
3.1.3.5	Referral to an aggregator or gateway		In this case an index or abstract service refers the customer to the gateway for full-text. In this case the full-text is delivered according to one of scenarios 3.1.3.2, 3.1.3.3 or 3.1.3.4 above, and the recording and supplying of usage statistics to the customer is as specified in each of these cases.
3.1.4	How user is authenticated		
3.1.4.1	Username and password		No definition required
3.1.4.2	IP address	The IP address seen by the primary service- this may be the real end-user's IP or a proxy IP. This is always recorded, even if the authentication is not via IP address	IP address of the computer on which the session is conducted
3.1.4.3	Customer-authenticated user	Referring URL, Athens	User authentication is provided by a referring service that has an agreement with the online resource that allows the referring services own users access to the online resource
3.1.5	Access rights	Rights for using a vendor's online collection or database defined by law, license, or other contractual and/or co-operative agreement. (NISO)	
3.1.5.1	Access granted	Yes/no	User is granted access to the online collection or database, or subsets thereof, subject to the access rights specified in the agreement with the vendor
3.1.5.2	Session		A successful request of an online service. It is one cycle of user activities that typically starts when a user connects to the service or database and ends by terminating

			activity that is either explicit (by leaving the service through exit or logout) or implicit (timeout due to user inactivity) (NISO)
3.1.5.3	Timeout		Automatic termination of a session due to a period of user inactivity. The average timeout setting would be 30 minutes. If another timeout period is used this should be reported. (NISO)
3.1.5.4	Turnaway (Rejected session)		A turnaway (rejected session) is defined as an unsuccessful log-in to an electronic service by exceeding the simultaneous user limit

Session data

Table 2. Definitions of terms used in the COUNTER Code of Practice

#	Term	Examples/formats	Definition
3.2.1	Start time	Yyyy-mm-dd-hh-mn-ss	Records the time a user's session begins (first login or IP authentication), to the nearest second, using UTC (Co-ordinated Universal Time, formerly GMT)
3.2.2	End time	Yyyy-mm-dd-hh-mn-ss	Records the time a user's session ends or timeouts, to the nearest second, using UTC (Co-ordinated Universal Time, formerly GMT)
3.2.3	Duration		Records the time a user's session lasts, to the nearest second
3.2.4	Total activity		Total number of views or downloads of items per session.

Market Elements

Table 3. Definitions of terms used in the COUNTER Code of Practice

#	Term	Examples/formats	Definition
3.3.2	Subscriber		An individual or organization that pays a vendor in advance for access to a specified range of the vendor's services and/or content for a pre-determined period of time and subject to terms and conditions agreed with the vendor.
3.3.3	Licensee		= Subscriber (see 3.3.1 above)
3.3.4	Consortium	Ohiolink	The consortium through which the institution or user obtained online access. A consortium is defined by a range of IP addresses that may be in specific groupings (e.g. institutes)

3.3.5	Consortium member	Ohio State University	A university, hospital or other institute that has obtained access for its users to online information resources as part of a consortium. A consortium member is defined by a subset of the Consortium's range of IP addresses.
3.3.6	IP address		See 3.1.4.2 above
3.3.7	User		An individual with the right to access the online resource, usually provided by their institution, and conduct a session
3.3.8	Onsite usage		Computer being used to access the online resource is within a building or on the campus of an institution (EBSCO)
3.3.9	Remote usage		Computer being used is off-campus, or away from the Institution's property, e.g. access by a user from home

Usage Reports

This section lists the COUNTER Usage Reports and specifies the content, format and delivery specifications that these reports must meet to be designated 'COUNTER-Compliant'.

Note:

- Terms for which there are definitions in Section 3 above are highlighted below. Click on the highlighted term to view the definition.
- Level 1 is the minimum level of reporting that vendors must supply in order for their usage reports to designated 'COUNTER-Compliant (Level 1)'
- Level 2 is a more detailed level of COUNTER-compliant reporting that provides more information for customers. If vendors can supply these usage reports to customers now, they are encouraged to do so and will be designated 'COUNTER-Compliant (Level 2)'.

Usage Reports: Level 1

Examples are provided below of the four Usage Reports that vendors must supply for Level 1 COUNTER Compliance.

Journal Report 1: Number of Successful Full-Text Article Requests by Month and Journal

(Full journal name, print ISSN and online ISSN are listed.)

	Print ISSN	Online ISSN	Jan-01	Feb-01	Mar-01	Calendar YTD
Total for all journals			6637	8732	7550	45897
Journal of AA	1212-3131	3225-3123	456	521	665	4532
Journal of BB	9821-3361	2312-8751	203	251	275	3465
Journal of CC	2464-2121	0154-1521	0	0	0	0
Journal of DD	5355-5444	0165-5542	203	251	275	2978

Note:

1. the 'Total for all journals' line is provided at the top of the Table to allow it to be stripped out without disrupting the rest of the Table, as the number of journals included may vary from one month to another.
2. Journals for which the number of full-text article requests is zero in every month should be included in Journal Report 1

The above report complies with the COUNTER Code of Practice for collection and reporting of usage data. For definitions of the terms used, See Section 3.

Journal Report 2: Turnaways by Month and Journal

(Full journal name, print ISSN and online ISSN are listed.)

This report is applicable only where the user access model is based on a maximum number of concurrent users

	Print ISSN	Online ISSN	Page Type	Jan-01	Feb-01	Mar-01	Calendar YTD
Total Full-text Turnaways for all Journals				453	233	318	4765
Journal of AA	1212-3131	3225-3123	Full text Turnaways	23	40	12	342
Journal of BB	9821-3361	2312-8751	Full text Turnaways	18	20	16	287

The above report complies with the COUNTER Code of Practice for collection and reporting of usage data. For definitions of the terms used, See Section 3.

Database Report 1: Total Searches and Sessions by Month and Database

		Jan-01	Feb-01	Mar-01	Calendar YTD
Database AA	Searches Run	2322	2520	2742	29878
Database AA	Sessions	1821	1929	2211	27654
Database BB	Searches Run	3466	3210	4459	36543
Database BB	Sessions	1987	2200	2544	24209

The above report complies with the COUNTER Code of Practice for collection and reporting of usage data. For definitions of the terms used, See Section 3.

Database Report 2: Turnaways by Month and Database

This report is applicable only where the user access model is based on a maximum number of concurrent users.

		Page Type	Jan-01	Feb-01	Mar-01	Calendar YTD
Total Database Record Turnaways for all Databases	Database Record Turnaways		453	233	318	2435
Database AA	Database Record Turnaways		23	40	12	60
Database BB	Database Record Turnaways		18	20	16	82

The above report complies with the COUNTER Code of Practice for collection and reporting of usage data. For definitions of the terms used, See Section 3.

Database Report 3: Total Searches and Sessions by Month and Service

		Page Type	Jan-01	Feb-01	Mar-01	Calendar YTD
Total for Service	Searches Run		16567	18643	20987	80654
Total for Service	Sessions		12007	12677	13003	65487

The above report complies with the COUNTER Code of Practice for collection and reporting of usage data. For definitions of the terms used, See Section 3.

Customer categories for Usage Reports:

Customer accounts, access and entitlements to vendor sites are organized in a number of different ways, but most commonly by IP addresses or by username/password.

The vendor should provide the functionality to create usage reports on different levels for the customer at the Consortium, Consortium Member, Institute or Department level.

Note: it is not always possible to require usage reports for a specific IP address (unless it is a proxy server), as this may violate privacy laws.

The exception to this is in the case of misuse (such as usage by a crawler or spider, which can be attributed to a single IP address) where the vendor may provide a report for an individual IP, to allow the customer to deal with the misuse.

Report delivery

Report delivery must conform to the following standards for Release 1:

- Reports must be provided either as a CSV file, as a Microsoft Excel file, or as a file that can be easily exported to Microsoft Excel
- Reports should be made available on a password-controlled website (accompanied by an e-mail alert when data is updated)
- Reports must be provided at least monthly
- Data must be updated within two weeks of the end of the reporting period
- All of last calendar year's data and this calendar year's to date must be supplied

Types of report: Level 2

Below are listed examples of two reports that are not mandatory for compliance with COUNTER Release 1, but which will be required for subsequent releases, and which vendors are encouraged to provide if they are in a position to do so.

Journal Report 3: Number of Successful Item Requests and Turnaways by Month, Journal and Page-Type

(Full Journal name, print ISSN and Online ISSN are listed)

Journal Name	Print ISSN	Online ISSN	Page Type	Jan-01	Feb-01	Mar-01	Calendar YTD
Journal of AA	1212-3131	3225-3123	Table of Contents	732	806	676	3543
Journal of AA	1212-3131	3225-3123	Abstracts	1032	1140	1020	6896
Journal of AA	1212-3131	3225-3123	References	543	322	567	4002
Journal of AA	1212-3131	3225-3123	Full-text Postscript Requests	444	365	432	3987
Journal of AA	1212-3131	3225-3123	Full-text PDF Requests	621	670	598	4657
Journal of AA	1212-3131	3225-3123	Full-textHTML Requests	322	420	543	4433
Journal of AA	1212-3131	3225-3123	Full-text Total Requests	943	1090	888	5021
Journal of AA	1212-3131	3225-3123	Full-text PDF Turnaways	23	40	32	186
Journal of AA	1212-3131	3225-3123	Full-textHTML Turnaways	10	21	18	102
Journal of BB	9821-3361	0154-1521	Table of Contents	220	300	346	1809
Journal of BB	9821-3361	0154-1521	Abstracts	180	202	154	990
Total for all Journals			Table of Contents	66322	70312	81554	400980
Total for all Journals			Abstracts	54126	46005	55265	267980
Total for all Journals			References	4532	3987	5473	34876

Total for all Journals			Full-text Postscript Requests	11345	10947	12534	66007
Total for all Journals			Full-text PDF Requests	32112	34554	38221	224623
Total for all Journals			Full-textHTML Requests	22500	24000	19500	107841
Total for all Journals			Full-text Total Requests	54612	58554	57721	394532
Total for all Journals			Full-text PDF Turnaways	3221	4112	2113	8765
Total for all Journals			Full-textHTML Turnaways	1123	1321	1511	6453

This report complies with the COUNTER Code of Practice for collection and reporting of usage data. For definitions of the terms used, see Section 3 above.

Journal Report 4: Total Searches Run by Month and Service

(This report includes saved searches, modified searches, and searches with zero results)

		Jan-01	Feb-01	Mar-01	Calendar YTD
Collection AA	Searches Run	2322	2520	2742	8006
Collection BB	Searches Run	1588	1322	1643	6998

This report complies with the COUNTER Code of Practice for collection and reporting of usage data. For definitions of the terms used, see Section 3 above.

Report delivery

As for Level 1 (Section 4.3 above), except that all of the last two calendar years' data and this calendar year's to date must be supplied.

Data Processing

Usage data collected by vendors/intermediaries for the usage reports to be sent to customers should meet the basic requirement that only intended usage is recorded and that all requests that are not intended by the user are removed.

Because the way usage records are generated can differ across platforms, it is impractical to describe all the possible filters used to clean up the data.

This Code of Practice, therefore, specifies only the requirements to be met by the data to be used for building the reports.

Usage data can be generated by the web-server holding the content (logfiles) or by storing the usage information in so-called 'key-events' at content holding databases.

Requirements

Only successful and valid requests should be counted. For webserver-logs successful requests are those with a specific return code. The standards for return codes are defined and maintained by NCSA (<http://archive.ncsa.uiuc.edu/edu/trg/webstats/>).

1. In case key events are used their definition should match the NCSA standards.
2. Records generated by the server together with the requested page (e.g. images, gif's , style sheets (.css)) should be ignored.
3. Internal usage should be filtered out.
4. All users' double-clicks on an http-link should be counted as only 1 request.
5. The time window for occurrence of a double-click should be set at 10 seconds between the first and the second mouse-click.
6. There are a number of options to make sure that a double click comes from one and the same user:
 - a. where only the IP address of a user is logged that IP should be taken as the field to trace double-clicks
 - b. when a session-cookie is implemented and logged, the session-cookie should be used to trace the double-clicks.
 - c. when user-cookies are available and logged, the user-cookie should be used to trace double-clicks
 - d. when the username of a registered user is logged, this username should be used to trace double-clicks.

The options 1 to 4 above have an increasing level of reliability for filtering out double-clicks: option 1 has the lowest level of precision (and may lead to underreporting from the vendor perspective) while with option 4 the result will be optimal.

7. The rendering of a PDF takes longer than the rendering of an HTML page. Therefore requests by one and the same IP/username/session- or user cookie for one and the same pdf should be counted as a single request if these multiple requests occur within a 30 seconds time window. These multiple requests may also be triggered by pressing a refresh or back button on the desktop by the user.

Auditing

Auditing will be required to validate the usage reports and processes described in Sections 4 and 5 above and will be an integral part of the COUNTER Code of Practice. At the time of publication of Release 1 of the Code of Practice (December 2002), detailed auditing requirements are in the process of being developed, and it is planned to incorporate these into the Code of Practice by December 2003. Meanwhile, those vendors wishing to be designated COUNTER-compliant during 2003 will be required to give the COUNTER office access to a set of their usage reports and to sign a declaration stating that the reports and data supplied conform to the specifications of the COUNTER Code of Practice. See Section 7 below.

Compliance

Timetable and procedure

From January 2004 COUNTER-compliant vendors will be required to have their usage reports, as well as the internal processes that generate the data included in them, audited by an independent, COUNTER-approved auditor. Vendors who are in a position to adopt the Code of Practice earlier are encouraged to do so.

A Register of Vendors Providing COUNTER-compliant Usage Reports will be maintained by the COUNTER office and posted on the COUNTER website. In 2003, vendors may apply for inclusion on the Register of COUNTER-compliant vendors by submitting to the COUNTER office a Declaration of COUNTER-compliance (Appendix A), signed by the vendor, which states that the usage reports and other usage data provided to customers by the vendor are COUNTER-compliant. To maintain COUNTER-compliant status from January 2004, this Declaration will have to be accompanied by a report from an independent, COUNTER-approved auditor confirming that the usage reports and data are indeed COUNTER-compliant. A list of COUNTER-approved auditors will be posted on the COUNTER website.

The signed declarations should be sent to the COUNTER office.

Licence agreements

To encourage widespread implementation of the COUNTER Code of Practice, customers are urged to include the following clause in their licence agreements with vendors, from December 2003:

The licensor confirms to the licensee that usage statistics covering the online usage of the journals and databases included in this licence will be provided. The licensor further confirms that such usage statistics will adhere to the specifications of the COUNTER Code of Practice, including data elements collected and their definitions; data processing guidelines; usage report content, format, frequency and delivery method.

Aggregators, gateways and hosts

Many, perhaps the majority, of online searches, are conducted using gateways or aggregators, rather than on the site of the original vendor of the item being sought. This presents special challenges for the collection of meaningful usage statistics. Section 3 of the Code of Practice specifies where responsibility lies for the recording and supplying of usage statistics when an intermediary aggregator or gateway is involved (see Section 3, Table 1, Terms 3.1.3.1, 3.1.3.2, 3.1.3.3,

3.1.3.4 and 3.1.3.5). The five scenarios defined therein describe protocols for delivery of the requested page to the customer:

- Direct from the vendor's server
- Direct from an aggregator
- Referred from an aggregator or gateway
- Via a gateway
- Referred to an aggregator or gateway

Customer confidentiality

Privacy and user confidentiality

Statistical reports or data that reveal information about individual users will not be released or sold by vendors without the permission of that individual user, the consortium, and its member institutions (ICOLC Guidelines, December 2001)

Institutional or Consortia Confidentiality

Vendors do not have the right to release or sell statistical usage information about specific institutions or the consortium without permission, except to the consortium administrators and other member libraries. Use of institutional or consortium data as part of an aggregate grouping of similar institutions for purposes of comparison does not require prior permission as long as specific institutions or consortia are not identifiable. When required by contractual agreements, vendors may furnish institutional use data to the content providers. (ICOLC Guidelines, December 2001).

References to other standards, protocols and codes of practice

COUNTER has built on the work of a number of other existing initiatives and standards relevant to usage statistics. Most relevant among these are:

- ARL New Measures Initiative. This has been set up in response to two needs: increasing demand for libraries to demonstrate outcomes/impacts in areas important to the institution, and increasing pressure to maximise resources. Of particular interest is the work associated with the E-metrics

portion of this initiative, which is an effort to explore the feasibility of defining and collecting data on the use and value of electronic resources. This sets a useful context for COUNTER. Further information on the ARL E-metrics project can be found at www.arl.org/stats/newmeas/newmeas.html

- ICOLC Guidelines for Statistical Measures of usage of Web-based Information Resources. The International Coalition of Library Consortia (ICOLC) has developed a set of guidelines, revised in 2001, which specify a set of minimum requirements for usage data, and also provide guidance on privacy, confidentiality, access, delivery and report format. The ICOLC Guidelines are particularly relevant to COUNTER. Additional information may be found at www.library.yale.edu/consortia/2001webstats.html
- NISO Forum on Performance Measures and Statistics for Libraries and NISO Standard Z39.7. Aspects of a number of NISO standards are relevant to COUNTER. For further information, see www.niso.org

Governance of COUNTER

COUNTER is incorporated as a public limited company in the United Kingdom. Legal responsibility lies with its Board of Directors, while an Executive Committee, supported by an International Advisory Board is responsible for the overall management and direction of the project. Specific responsibilities are delegated by the Executive Committee to the Project Director, who is responsible for the day-to-day management of COUNTER. (See Appendix B).

Maintenance and development of the COUNTER Code of Practice

The Executive Committee of COUNTER has overall responsibility for the development and maintenance of the Code of Practice. New releases, which will extend the Code of Practice to cover a wider range of content types, will be made no more than once per annum.

The COUNTER Executive Committee welcomes comments on the Code of Practice and these may be forwarded, by e-mail, to the Project Director at www.projectCounter.org. Comments on Release 1 of the Code of Practice will be accepted for a period of 1 year, January-December 2003.

When providing your comments you are requested to adhere to the following guidelines:

- Please be as specific as possible, making sure to note the relevant section and subsection of the Code of Practice.
- Where you are proposing an addition to the Code of Practice, please indicate the preferred section within the current version

Appendix A: Vendor/Aggregator/Gateway Declaration of COUNTER Compliance

We <name of vendor/aggregator/gateway> (The Company) hereby confirm the following:

1. That the online usage reports that are supplied by The Company to its customers, and which The Company claims to be 'COUNTER-compliant', conform to Release 1 of the COUNTER Code of Practice:

< list COUNTER-compliant reports, 'Journal Report 1, etc..>
2. Where The Company supplies to customers online usage statistics not included in the usage reports covered in 1 above, but which use terms defined in the COUNTER Code of Practice, that the definitions used by The Company are consistent with those provided in the COUNTER Code of Practice.
3. That upon receipt of this signed declaration by the COUNTER office, The Company will be listed on the 2003 Register of Vendors Providing COUNTER-compliant Usage Reports.
4. That to maintain COUNTER-compliant status beyond 2003, the usage reports provided by The Company to its customers will have to be audited according to standards specified by COUNTER and by an external auditor approved by COUNTER.

Signed: _____

Name: _____

For and on behalf of <name of vendor/aggregator/gateway>

This signed declaration may be sent to COUNTER by fax or by mail:

Fax: +44 (0)131 558 8478

Mail: COUNTER, PO Box 23544, Edinburgh EH3 6YY, United Kingdom

Appendix B: Organizational Structure of COUNTER

IN 2003 COUNTER was formally incorporated in England as a not-for-profit company, Counter Online Metrics. It has a Board of Directors which has invested responsibility for the overall management and direction of COUNTER in the Executive Committee, chaired by Richard Gedye of Oxford University Press. Day-to-day management is delegated to the project director, Peter Shepherd.

The International Advisory Board of COUNTER consists of leading experts from the publishing, library and intermediary world who support and advise on the direction of the project.

The memberships of the Board of Directors, Executive Committee and International Advisory Board are listed below:

Board of Directors

Richard Gedye (Chair)
Christine Fyfe
David Goodman
Ann Okerson
Peter Shepherd
Eefke Smit

Executive Committee

Richard Gedye (Chair)
Marthyn Borghuis
Roger Brown
Phil Davis
Christine Fyfe
David Goodman
Timo Hannay
Arnold Hirshon
Terry Hulbert
Tony Kidd
Eileen Shanbrom
Oliver Pesch
Peter Shepherd (Project Director)
Hazel Woodward

International Advisory Board

Christine Baldwin, Information Design & Management, UK
John Carlo Bertot, Florida State University, USA
Frances Boyle, Oxford University, UK
Andrew Braid, British Library, UK
Patricia Brennan, Thomson ISI, USA
Michael Butterfield, BMJ Group, UK
Diane Costello, ANU, Australia
Denise Davis, Oregon State University, USA
Lorraine Estelle, JISC, UK
Mary Fugle, Lippincott Williams & Wilkins, USA
Kristen Garlock, JSTOR, USA
Emily Gillingham, Blackwell Publishing, UK
Brian Green, BIC/EDItEUR, UK
Tony Hammond, Elsevier, UK
Pat Harris, NISO, USA
Syed Hasan, Springer, USA
Frank Hermes, OCLC, USA
Mike Hoover, ProQuest
Heather Joseph, BioOne
Kornelia Junge, Wiley, USA
Katharina Klemperer, Harrassowitz, USA
Barbara Lange, AAP/PSP, USA
Judy Luther, Informed Strategies, USA
Lex Lefebvre, STM, The Netherlands
Ross MacIntyre, University of Manchester, UK
Alison McNab, University of Nottingham, UK
Liz McNaughton, Divine/ICEDIS
Tim Martin, OCLC
Kirsty Meddings, Ingenta, UK
Robert Molyneaux, NCLIS, USA
Sally Morris, ALPSP, UK
James Mouw, University of Chicago, USA
Sebastian Mundt, Hamburg, Germany
Henning Nielsen, Novo Nordisk, Denmark
Lynn Norris, EduServ, UK
Jill O'Neill, NFAIS, USA
Chris Parker, CABI, UK
Norman Paskin, DOI, UK
John Sack, HighWire Press, USA
Sherrie Schmidt, ARL, USA
Graham Taylor, Publishers' Association, UK

Jill Taylor-Roe, University of Newcastle, UK
Rollo Turner, ASA, UK
Syun Tutyia, Chiba University, Japan

Appendix C: Errata

Version: 01 (May 2003)

Listed in the Table below are errata and other changes made since Release 1 of the Code of Practice was published on 14 January 2003.

Location of change	Date of change	Original text	New text
2.8 Auditing and COUNTER compliance -lines 5-6	19 /03/03	'the Usage Reports defined as 'Level 1' in Section 3 , using the definitions defined as 'Level 1' in Section 4 ..	'the Usage Reports defined as 'Level 1' in Section 4 , using the definitions defined in Section 3 .'
3.2 Session data 3.2.1	19/03/03	Yyyy-mm-dd-mn-ss	Yyyy-mm-dd- hh -mn-ss
3.2 Session data 3.2.2	19/03/03	Yyyy-mm-dd-mn-ss	Yyyy-mm-dd- hh -mn-ss
4.1 Usage Reports: Level 1 4.1.1	19/03/03	'Examples are provided below of the four Usage Reports.'	'Examples are provided below of the five Usage Reports.'

Note: Old text which has been removed is highlighted in **red**. New text which has been inserted is highlighted in **blue**.

Appendix D: Guidelines for Implementation

Version: 02 (October 2003)

Introduction

The Guidelines for Implementation provided here are designed to help vendors and customers understand and implement the COUNTER Code of Practice. The issues covered have been chosen largely in response to specific questions raised by users and potential users of the Code of Practice.

For ease of reference, the numbering used in these Guidelines corresponds exactly to that of the Code of Practice itself; where appropriate the relevant section of the Code of Practice text is quoted.

4.3: 'Data must be updated within two weeks of the end of the reporting period.'

Modification to this requirement

The COUNTER Executive Committee has reviewed this requirement in view of the problems that the two week deadline causes aggregators and vendors with large numbers of online titles, for which there is a correspondingly large amount of usage data to be processed. It has been decided that this deadline will be extended to four weeks in Release 2 of the Code of Practice. For this reason, vendors and aggregators will, from now on, be deemed COUNTER compliant if they can make their usage reports available within four weeks of the end of the reporting period.

5a: 'Only successful and valid requests should be counted. For webserver-logs successful requests are those with a specific return code. The standards for return codes are defined and maintained by NCSA.'

Requirement for Implementation:

Return codes that indicate a successful or valid request are specified in agreed, international web standards and protocols. The relevant governing document for hypertext protocols is RFC2068, which contains definitions for each Return Code number. There are five categories of return code numbers:

- 1xx (Information): this category provides information on a request, and often indicates that the user has come upon an experimental application.
- 2xx (Success): reserved for successful responses. This category of code is not usually seen by the user, but their browser will receive them and will know that whatever request was sent by the browser was received, understood and accepted.
- 3xx (Redirection): indicates the need for further action by the user's browser. User action may not be necessary, as the browser may deal with it automatically.
- 4xx (Client Error): this category of code is the one most frequently seen by the user and indicates an error.
- 5xx (Server Error): indicates where the server knows it has made an error, or is not capable of answering the request.

Categories 2xx and 3xx are relevant to Section 5a of the COUNTER Code of Practice, which deems that only the following specific return codes indicate a successful or valid request:

- 200 (OK) The request was successful and information was returned. This is, by far, the most common return code on the web.
- 304 (Not modified) In order to save bandwidth a browser may make a conditional request for resources. The conditional request contains an 'If-Modified-Since' field and if the resource has not changed since that date the server will simply return the 304 code and the browser will use its cached copy of the resource.

Requests that result in any other return codes within the 2xx and 3xx categories must not be counted. This exclusion covers:

- 206 (Partial content) This indicates that the server has only filled part of a specific type of request.
- 301 (Moved permanently): The addressed resource has moved, and all future requests for that resource should be made to the new URL. Transfer to the new location may be automatic or may require manual intervention by the user. Either way, a successful request to the new location will generate a 200 return code.

- 302 (Moved temporarily) This indicates that the content has moved while the page requested still has the same URL. The page is, therefore, not retrieved and must not be counted.
- 303 (See other) The response to the browser's request can be found elsewhere. Automatic redirection may take place to the new location.

Full information on the five categories of http return codes and their definitions may be found at: <http://www.w3.org/Protocols/rfc2068/rfc2068> goto: Chapter 10 (pp 53-64): Status Code Definitions. More summarised information may be found at: http://www.cknow.com/ckinfo/def_h/httpreturncodes.shtml.