

Memo CP-D/299

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To: Distribution

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Subject: Standards in Statistics

Proposal on Standard in Nuclear Data User Services Statistics

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Due to the different media used for the nuclear data user services and expansion of free available access of the users to the data with a minimal control of the centres, there is a need to co-ordinate the definitions of the elements of the service statistics used by centres. The most important elements are retrievals and requests.

Ordinary Mail

One request is one letter, one e-mail letter, one phone call or any other type of message from user requesting information materials and (or) data files or libraries.

One surface mail dispatch is a letter or package sent to user with materials prepared on his request.

One retrieval contains one homogenous piece of information. It can be one report, or set of different data retrieved from one library or data base, or computer code or codes when they are distributed as a package.

One request may contain a few retrievals.

Nuclear Data Information System (Telnet NDIS)

The program accounting NDIS statistics was developed by NNDC.

One request may be considered as one entry into any component of the NDIS (EXFOR, CINDA, ENDF,...).

One retrieval is considered as at least one user creating output either on hard disk or in screen mode.

As seen there can be requests without retrievals. Also if the user entered into (say for example) EXFOR system, searched and retrieved data, went out from EXFOR system and then during one Telnet session repeated the search and retrieval from EXFOR again, - it will be accounted as two separate retrievals.

File Transfer with FTP.

The total number of FTP sessions can be accounted. If centre keeps detailed FTP log records, the statistics of retrievals by user and filename (database, data library) can be also generated.

World Wide Web Service.

At present, the centres use different software which prepares statistical reports of Web retrievals by users or topics. Usually, the installed Web server software produces detailed records in Web log file on each user's action. But existing statistics preparing programmes allow to evaluate only approximate number of Web sessions by month and country (laboratory). The accuracy of this statistics is limited by absence of complete table of correspondence between IP/host addresses and countries, by difficulties in determination what is one user session and in difference between simple superficial browsing and serious user's retrieval.

The one user's Web session may be determined at present as one continuous set of Web log records belonging to this particular user. If two sequential log records belonging to the same user are separated more than half an hour time interval they have to be considered as belonging to the different sessions.

The statistics of the Web retrievals by country (laboratory) and topic can be created from Web log records analysis. Number of hits per Web page may show only the present interest of users to the topics displayed on this particular page. The number of successfully (retrieved) downloaded files separated on topics will present the statistics of the data retrievals. Possibly the most superficially browsing users are not interested in downloading of the files.

Summary

There is a big difference in the elements of statistical account which reflects the use of different media to meet the users requests. The efforts which are spent in the centre to fulfil requests through different media are usually very different. The accuracy of statistics for these different types of services is also very different. At present it seems logical to keep separately the statistical account of retrievals based on different media. The statistical account can be given on (with definitions given above):

- number of requests and retrievals (including by country, topic and type of media) for ordinary mail;
- number of retrievals (including by country and topic) for Telnet NDIS;
- number of FTP sessions and retrievals (including by country and topic)
- number of Web sessions, Web pages hits and retrieved (downloaded) files (including by country and topic).