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Module : 18 Library Automation: Acquisition



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Library Automation: Acquisition

I. Objectives

The module intends to impart knowledge of the following aspects of library acquisition system:

- Basics of automated acquisition system;
- Understand the purpose of automated acquisition system;
- Workflow in an automated acquisition system;
- To Understand management reporting system;
- Implication of computer technology on library acquisition system;
- Understand the concept of master databases; and
- To understand about e-books management and Patron Driven Acquisition (PDA) system.

II. Learning Outcomes

After going through this module, learners attain knowledge about automated acquisition system, its components, process of document procurement, etc. They would also learn about the benefit and purpose of automated acquisition system, major functions of automated library acquisition systems and general flow of work followed in a library automation systems for acquisition of documents.

III. Module Structure

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1. Introduction

Libraries are user centric institutions that focus on user's satisfaction. Information and Communication Technology (ICT) has brought significant changes in the various services given by the libraries. An automated acquisition system is generally referred to as book ordering system wherein various steps involved in traditional acquisition process are automated. Acquisition is the process for developing library collection by selecting, ordering, and receiving documents. It is also called as a process of collecting book and non-book materials by different modes such as purchase, exchange and gratis. It is a core process which is followed to enhance library's collection. It is also referred to as a department in the library which is responsible for selecting, ordering, and receiving new materials and for maintaining accurate records.

Acquisition is a set of interrelated activities involved in building and maintaining a collection of library resources to serve the needs of its clients (Kennedy, 2006). Acquisition is treated as core component of collection development in a library. The process of acquiring document includes evaluation of existing collection and taking proper decisions about usefulness of the document over a period of time. There are numerous challenges, trends and paradigm shifts occurring in acquisition management in libraries. Incessant development in ICT, information clog up, paradigm shift in scholarly content, digression of funds, fiscal constraints are the major factors influencing the process of acquisition.

The module covers brief information about automated acquisition system, workflow in an automated acquisition system, ordering system, e-book purchasing system, master databases such as vendors, budget, currency, types of document, authority files, etc.

2. Purposes of Automated Acquisition System

Basic purposes of an automated acquisition system are as follows:

- To have effective and efficient control over requests, approvals, purchase orders and budget management;
- To record and maintain bibliographic and administrative information of acquisition data;
- To provide accurate information about funds committed and requirements;
- To provide necessary management information reports, as and when required;
- To reduce manpower, time consuming work, repetitive jobs, involved in manual acquisition system; and

- To have an efficient and effective control over receipt of individual document from a purchase order, reminder for outstanding documents, etc.

3. Component of Automated Acquisition System

Automated acquisition system consists of three major components, For Example, master database, acquisition process and reports as shown in Fig. 1 given below:

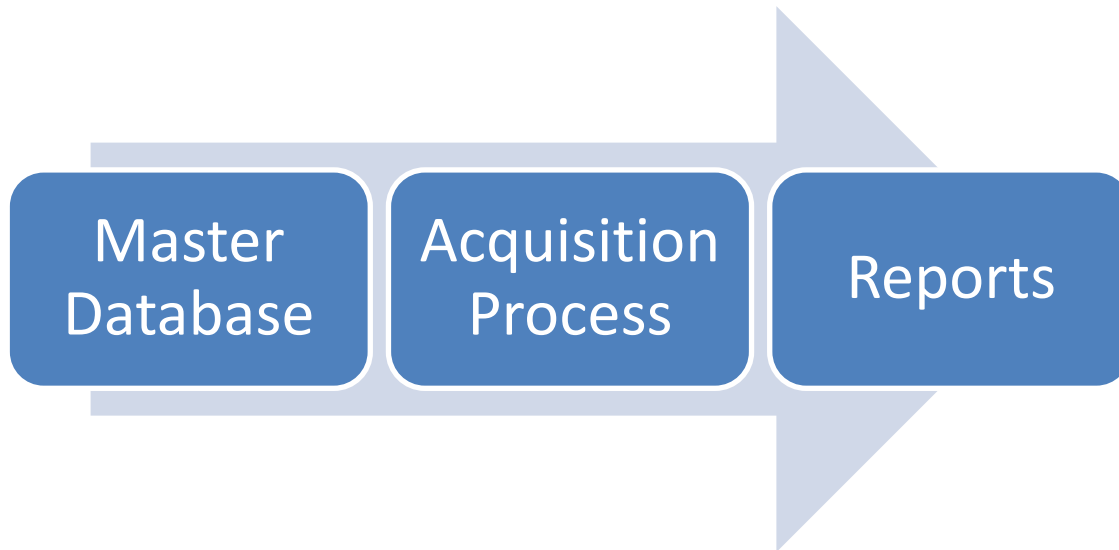


Figure – 1: Components of Automated Acquisition System

3.1 Master Database

Automated acquisition system is a set of tasks carried out for automating the whole acquisition process. To avoid frequent inputting of data in the acquisition process, the details related to authority files, vendors, budget, currency, types of document, etc., are stored in a master database. Following are the important master databases which are essential and are pre-requisite for any automated document acquisition system:

3.1.1 Authority Files

There are three types of authority files For Example, author, publisher and subject. In these files, necessary details such as name of the authors, dates associated with the name, name of the publisher, place of publisher, controlled vocabulary/subject keywords etc., are stored. Authority file allows library professionals to create and manage error free and unique database of authors, publishers, and keywords.

3.1.2 Vendor (Supplier/Publisher/Binder) Master

Vendors are one of the most important partners in the process of document acquisition as suppliers of books, periodicals, CD's etc. The details of vendors are stored in a master database to avoid repetitive tasks. The master database of vendor facilitates generation of unique code for each and every vendor and stores all the information such as communication address, email ID, phone no., contact person, area of specialization in which they are prompt in delivery of materials, etc. At the time of placing order or an inquiry, the system fetches all relevant details from master database.

3.1.3 Budget Master

Budget master is an important master database that stores information of the finances required to perform the financial transactions while acquiring the materials such as source of income, expenditure, allocations, etc. There are number of sources from where the budget may be allotted. Such details are stored in the budget master database. It allows all the budgetary functions required for maintaining proper accounts of the acquisition system. It also enables users to create income and expenditure heads, various sub heads and allocation of funds. It facilitates transferring of funds from one expenditure head to another head depending upon requirement.

3.1.4 Currency Master

Currency master database contains currency description, codes and prevailing exchange rates of foreign currencies in terms of Indian Rupees. The conversion is calculated automatically based on data entered in the master database. Conversion rates/Exchange rates can be updated on the basis of GOC/bank rates in the master file and it is reflected at the time of processing invoice.

3.1.5 Correspondence Master

The master database of correspondence stores all types of formats of letters required for day-to-day library operations such as purchase order, order cancellation, reminder and claim for outstanding materials. This master database allows user to store all type of terms and conditions formulated by the library in the form of letters.

3.1.6 Types of Document

The library procures different types of documents such as books, monographs, e-books, composite books, CD-ROM, conference proceedings, Braille, etc. The master file stores all types of documents in the databases, when a user selects particular type of document; it fetches other details from the master database.

3.2 Process of Document/Book Acquisition

Fig.2 below provides important steps ideally followed by most of the institutional libraries for document acquisition.

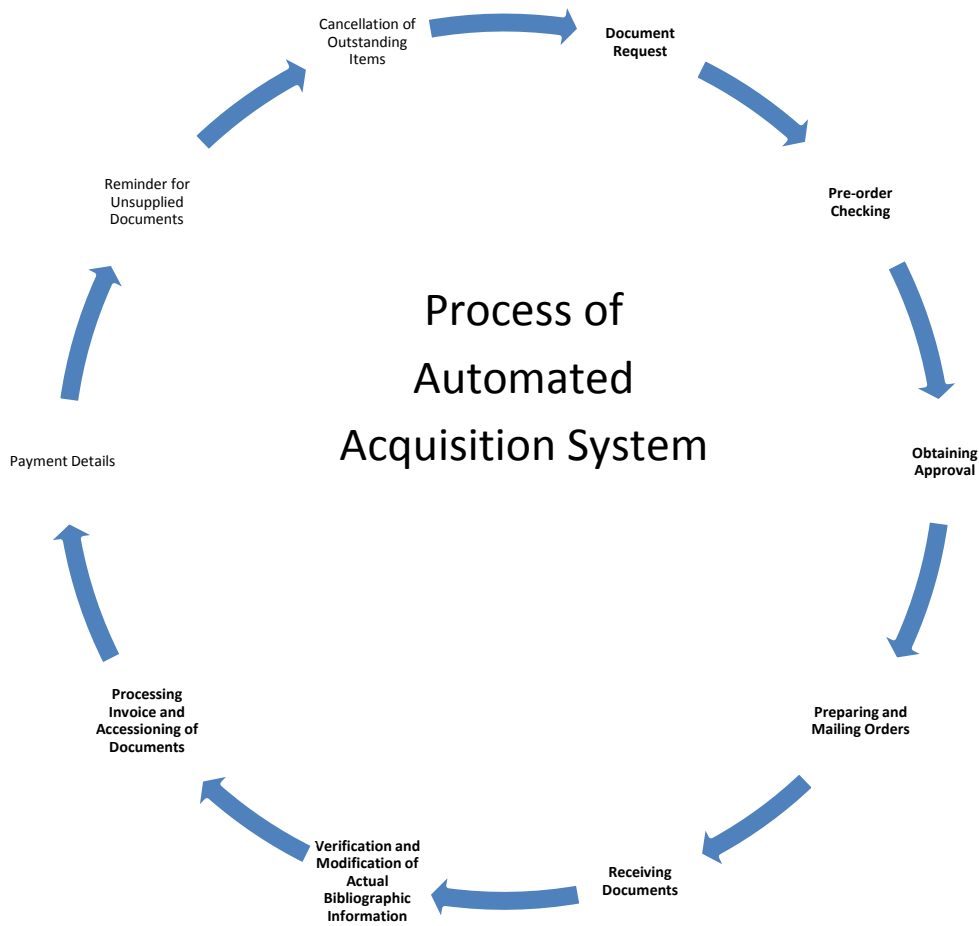


Fig.2: Process of Automated Acquisition System

3.2.1 DocumentRequest

Building library collection requires active participation of its stakeholders/users. Users are expected to recommend important documents useful to them. The documents are usually selected by the library based on the request of the users or from the tools such as bibliographies, publisher's catalogue, publishers interface (recommend to your library), book reviews, newspaperclippings, email, from an author's self-recommendation, information from the suppliers, etc. Generally, documents selection process is being done by the library staff in consultation with experts in the fields. Most of the automated acquisition system provides for a request from either in acquisition or in OPAC module.

3.2.2 Pre-order/Duplicate Checking

Once the request for a document is received, the same is checked for duplication. An automated acquisition system provides search interface to check whether requested book is available in the library's collection or not. It also facilitates the searching by various fields such as title, author, publisher, ISBN, etc. An automated system also provides Boolean search facility allowing users to combine search terms. This step is followed in an automated system to ensure availability of book in the library. If, the book is already available in the library's collection then it is marked as duplicate and it is not ordered unless multiple copies are required for a given book. One has to be careful while searching in the system because slight variations in the words may result in duplication. As such, it is advisable to check for duplicate by multiple approaches, For Example, by author(s)/editor(s), by title, by series, by ISBN, etc.

3.2.3 Obtaining Approval

As in case of traditional library system, the libraries are supposed to take approval from competent authority for acquisition of documents before placing purchase order. The same process is also followed in the automated acquisition system. Library prepares the list of books which are to be ordered with necessary details and send it to the competent authority. Once the item(s) is approved/unapproved the list comes back to the library and the same is updated in the automated acquisition system and the status of specific item is updated by the system accordingly. Some of the automated system also provides log in interface for competent authority to approve the titles. All the approved titles are then ready for ordering.

3.2.4 Preparing and Mailing Orders

Once the documents are approved by the competent authority, these documents are ordered with different vendors/ suppliers depending upon their efficiency in supplying books published by various publishers. Automated acquisition system allows user to create new order for each vendor. As soon as the order is created, the system loads all the approved titles, and as per the ordering criteria, vendors are picked-up and books are selected and included in a specific purchase order. The moment it is added in the purchase order, the status of book changed from “under process” to “ordered” and it will not appear in the list of books under processing. The automated system provides facility to directly send purchase order over email by clicking on “send email” option.

3.2.5 Receiving Documents

As and when a document is received by the library, it is entered in the system. The automated acquisition system provides facility to open specific order and receive the document from the order. If vendor supplies more than one document, then one by one all the documents in an order can be received. As soon as the document is received under particular order, the status of the document is changed from “Ordered” to “Received”. Once the document is received, the system enables assigning accession number and processing of invoice.

3.2.6 Verification and Modification of Actual Bibliographic Information

Before accessioning a book, it is advisable to verify the actual bibliographic details entered in the system. There may be slight variation in title, sub-title, place of publication; year and physical description. The automated acquisition system allows making necessary changes in bibliographic details as well as administrative details before processing it for accessioning and invoicing.

3.2.7 Processing Invoice and Accessioning of Documents

As soon as the verification and modification of bibliographic and administrative details is over, the item is further processed for invoicing and accessioning. The acquisition module facilitates processing of a new invoice and allows entering administrative details such as invoice number, invoice date, order number, discount, total invoice value, etc. The system fetches administrative information from master databases such as exchange rate, order details, vendor details, etc.

Once the invoice details are entered in the system, acquisition staff is allowed to assign accession number to those documents, which are received under a given order. As soon as the accession number is assigned, the system automatically calculates the amount after deducting discount, if any. After accessioning of all the books listed in the invoice the system matches the invoice value and calculates value. If the value matches, then it displays that the invoice process is completed otherwise, an alert message, For Example, “Incomplete Invoice” is displayed. The moment book is accessioned, the status in the system changes from “Received” to “Accessioned” and sent for “Technical Processing”.

3.2.8 Payment Details

Once the book is accessioned, the system enables payment approval process and generates the payment number against particular invoice number. Now, the invoice is sent for payment to the concerned department for releasing the payment. As soon as the payment is released, the system allows storing payment details such as cheque number, cheque date, bank and branch name as well as amount of the cheque.

3.2.9 Reminder for Outstanding Documents

As stated above, the process of acquisition consists of set of tasks performed till the time document is received, accessioned and sent for cataloguing. An automated system provides “lead time” facility that can be used for generating reminders for outstanding titles for various orders. Usually, this is done on the expiry of normal delivery time as mentioned in the terms and conditions of supply. For example, if an item is ordered on March 1, with a normal delivery time (Lead time) of six weeks, and if it is not supplied or received by April 16, the system treats the item as outstanding and generates reminder notice for that item and also sends automatic reminder to the vendor over email.

3.2.10 Cancellation of Outstanding Orders

After reminder to the vendor, if the book(s) are not supplied within grace period, then the system treats the item as cancelled from the order and the automatic intimation to this effect is sent to the vendor. The library can place order for cancelled item to an alternative vendor.

3.3 Serials Acquisition Process

Automated acquisition process for serial publications is slightly different than books. In case of books, the order is placed and supplier sends a book along with an invoice, whereas in case of serials advance payment has to be made and the issues of individual journals are delivered as and when they are published. Ideally, there are four steps involved in automated serials acquisition system as shown in Fig. 3 given below, For Example, Request/Selection, Ordering, Payment and Recording/Binding. Each step has several operations and procedures.

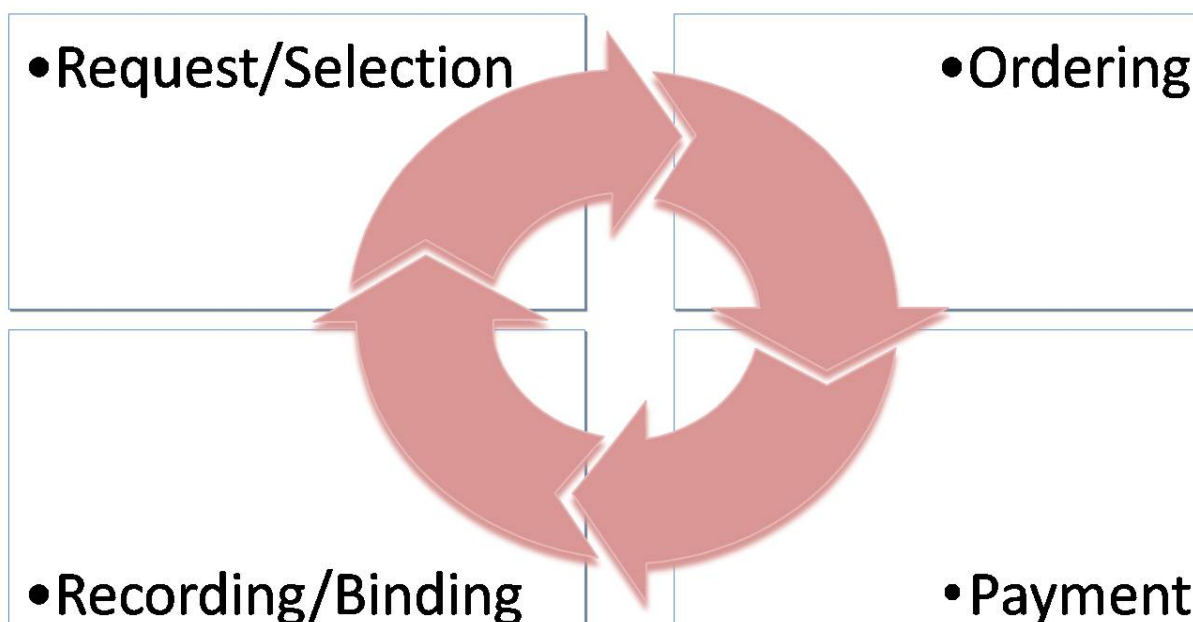


Fig.3: Serials Acquisition System

3.3.1 Request/Selection

Library, normally receives requests from the users for acquiring new serials publications. Serial acquisition work consists of a number of activities that tend to be repetitive. The request could be placed from OPAC as well as by filling-up a form. Request is nothing but a simple form in which requester has to provide basic information about the serial publications. Once the request is received, the library may display sample copy of some of the loose issues for recommendation from the other users. After this, requested title(s) is (are) sent for approval of the authority. The system allows competent authority to approve titles one by one or all the titles at a time using user ID and password. Similarly, library staff can also perform this task using their user ID and password.

3.3.2 Ordering

Once the title(s) is/are approved by the concerned authority, formal purchase order is prepared addressed to different vendors. If, any journal(s) is already subscribed during last year, then the renewal order can be placed with same vendor and in case of change in vendor for any title, firm order can be prepared in the name of new vendor. An automated serials acquisition provides sending orders through email. It also provides facility to download order copy in different formats such as MS-Word, PDF, MS-Excel, etc.

3.3.3 Payment

As soon as purchase order or renewal order is placed, the vendor forwards payment on behalf of the library, and raises an invoice along with necessary documents. These documents include remittance advice, photocopy of DD/cheque/wire transfer, bank exchange rate, price proof, etc. All these documents are verified by the library staff and if they are in proper order, the invoice is passed for payment. Most important difference between book acquisition and serials acquisition is advance payment. The acquisition module facilitates processing of a new invoice and allows entering administrative details such as invoice number, invoice date, order number, discount, total invoice value, etc. The system fetches other administrative information from master databases such as exchange rate, order details, vendor details, etc.

3.3.4 Recording and Binding

After placing order for serials, the serial publications are supplied to library as per their frequency and the same is recorded in the system. The system generates a control number for each loose issue which is useful to check out the loose issues of the journals to the users. If the serial is not supplied on time or in between the lead time, then the reminder is sent to the supplier with subscription number and payment details. Else one can also send consolidated list of outstanding issues. When the set of volume/s is completed, it is sent for binding and after binding it is added to the collection of the back volumes by assigning accession number.

3.4 Reports

A well designed acquisition system provides for a variety of reports required for day-to-day, as well as occasional work. The reports are used to frame the policy for

the library system. The automated acquisition system provides statistical as well as management reports. Following are some of the reports that can be generated by an automated acquisition system are as follows:

- An automated acquisition system facilitates library staff to generate various reports such as, list of requested items, approval letters, order reports (purchase order, reminder letter), accession register, invoice related report, etc.
- It also allows generating barcode label, financial statement, vendor wise supply status, vendor wise outstanding books, order wise supplied and outstanding items, reminder notice for outstanding items, etc.
- The system enables to generate report by budget head, department, suppliers/publishers, title, payment status, payment details and all correspondence letters to the accounts and vendors/publishers, etc.

4. Patron Driven Acquisition (PDA) System for E-Books

Patron-Driven Acquisition (PDA) is a model developed to enhance the collection of the library in terms of e-books. The main concept of this model is to purchase the e-books as and when it is required by the patron of the library. Generally, libraries providelist of e-books to the patron or an access to search interface provided by the publisher through their website or through library OPAC from which the patron can access the items. When the use of e-book(s) made accessible to users and if it reaches to a particular threshold in terms of number. of chapters downloaded or number. of pages viewed, the books is considered as purchased. The library may acquire the resource permanently, or acquire a license to use the resource only at certain times or in certain ways. PDA is a possible solution to the unsustainable rise in the cost of acquiring books.

Patron Driven Acquisition (PDA) is an ideal way to increase access to vast number of titles of the patron's choice, and purchase it, if it is used by the patrons of the library. When the patron refers to an e-book for certain times, the system allows patron to trigger the purchase.

There are two ways to provide electronic access to the patron.

A. Publishers Search Interface

Publisher provides list of titles available in their collection on specific subject to the library. The library identifies the titles in consultation with experts of the

subject domain and asks for the electronic access to the selected titles. Once the list goes back to the publishers, they provide search interface to all the selected titles with online access.

B. Library Catalogue/OPAC

Similarly, the publishers are providing free bibliographic records of all the titles published by them in widely accepted bibliographic format such as MACR21 or CCF. Once the records are in MARC/CCF format, these can be imported in the automated acquisition system. As soon as it is imported in the system, immediately it can be searched through OPAC.

4.1 Process of Patron Driven Acquisition System

Figure 4 below provides steps which may be followed for PDA:

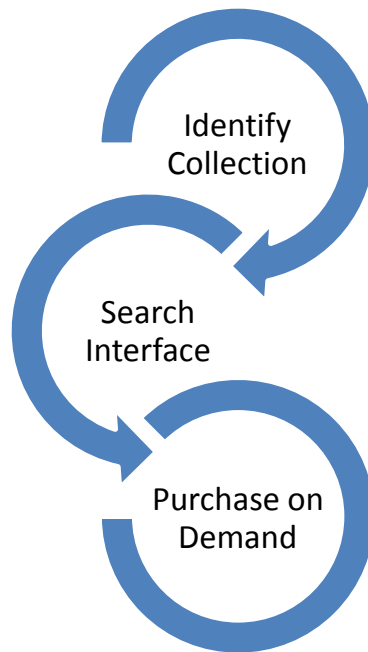


Fig.4: Process of Patron Driven Acquisition System

4.1.1 IdentifyCollection

Publisher provides list of titles published by them in specific subject domain. Selection of titles is made based on proximity of the book content with area of

patron's interest. The selection of titles may be from different publishers as well as subjects too.

4.1.2 Search Interface

Once the collection is identified, the publishers provide full-text access to the titles which are selected. As mentioned above, selected titles can also be searched through OPAC. The system allows access to the bunch of collections from which patron can search, discover or browse various collection through the interface.

4.1.3 Purchase on Demand

As soon as the titles are identified and loaded onto a searchable interface, full-text of these can be made accessible to the patrons. The criteria for triggering purchase need to be fixed with publishers. Following may be the criteria for automatic purchase of e-books:

- 1) Patron Download an eBook ;
- 2) Views an eBook for more than ten minutes;
- 3) Views more than ten pages of an eBook; and
- 4) Prints, emails, or copies and pastes a portion of an eBook page.

An automatic purchase is triggered when a patron access the book if any of the above criteria is fulfilled. The system can also provide approval facility to restrict automatic purchases and the library can keep eyes on the usage behavior of the patron. Based on the patron's interest, a profile can be set for single title as well as multiple titles and if it is approved by the concern authority, then only the e-books are purchased.

5. Summary

Acquisition system manages the process of placing order for documents as well as receiving, tracking and financial transactions. The module elaborates basics of automated acquisition system, components, process of document procurement, etc. It also provides brief information on purpose of automated acquisition system, major functions of automated library acquisition systems and general flow of work followed by almost all library automation systems for acquiring documents. The module also covers brief information on various types of reports. It provides concise information about the Patron Driven Acquisition (PDA) system for e-books acquisition.

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