

What is Z39.50?

Z39.50 is an American National Standards Institute (ANSI)/ National Information Standards Organization (NISO) communications protocol. It is used to search and retrieve bibliographic records in online databases of library holdings. It also allows you to download bibliographic records in MARC format and load into your library's bibliographical database at no cost. For more information, please see [The ANSI/NISO Z39.50 Protocol](#) .

How do I access the CGP using the Z39.50 protocol?

You will need a Z39.50 client that connects your system and the CGP server. If a Z39.50 client is built into your ILS, you will have to configure the 'Z39.50 gate' to allow the Z39.50 functionality in your ILS client. If you don't have a Z39.50 client built into your library system, you can download free Z39.50 client software from the Internet. View a [list of free and commercial programs](#)

What is the username and password to login?

Access to the CGP via Z39.50 is limited to depository libraries. The password for access is found in the new [Federal Depository Library Directory](#) . To access the password:

1. Login to the Directory;
2. Click on **Edit User Information** under **Options** in the left navigation menu. This brings up the **User Details** screen;
3. The password appears in the **Z39.50 Password** field. It is case-sensitive.
(Note: the background of this field is grayed because libraries cannot edit this field or change the password).

The 'user name' for Z39.50 is always "z39" as a convention in the Z39.50 protocol.

Why do I receive an error message when not being able to connect?

You may be experiencing firewall problems with your computer. Check with your network administrator whether relevant ports (i.e. CGP Z39.50 server port #9991, and/or whatever Z39_gate port you use to access the GPO Z39.50 server) need to be opened to enable connection.

How do I configure the Z39.50 gate in our library's ILS?

The setting of the Z39.50 gate in different integrated library systems (ILS) varies slightly. Use the following information to properly configure your Z39.50 gate for the CGP (target):

- Username: Z39
- Password: found in the Z39.50 field of the User Details screen of the FDL D
- Hostname: Z3950.catalog.gpo.gov (note: no period in Z3950)
- GPO server port number '9991'
- Database name 'GPO01PUB' (GPO zero one PUB)

You also need to map the "Bib-1" attributes that the CGP supports in your Z39.50 gate for the CGP target. If you have problems with the setting, you may need help from your ILS system staff. Or, ask your vendor for assistance.

For more information about the 'Bib-1 Attributes Set' see the [Z39.50 Maintenance Agency \(Library of Congress\)](#)

If I use a YAZ-client or other free/commercial Z39.50 clients how do I login into the CGP?

If you use a line-mode Z39.50 client, follow the following procedure to connect with the CGP server:

```
-----  
Z> authentication z39/password          ---> (hit 'Enter')  
Authentication set to Open z39/password ---> (System response)  
Z> open tcp:Z3950.catalog.gpo.gov:9991/GPO01PUB ---> (hit 'Enter')  
Connecting ... OK  
-----
```

Use the CGP Z39.50 information in the item '4' above to connect using commercial citation software such as "EndNote" or "RefWorks". Please contact the vendors if you have problems setting up the connection.

Two sites for more information on the use of free Z39.50 clients:

- [MarcEdit](#)
- [Mercury](#)

Note: GPO automation staff do not have expertise with Z39.50 clients beyond Aleph and cannot

provide support for them.

Can I retrieve CGP bibliographical records by the GPO Item Number (MARC field 074) via Z39.50?

GPO Item Number (MARC tag 074##) is a newly created Z39.50 Bib-1 use attribute proposed by GPO, and approved and implemented by the Z39.50 Standard Maintenance Agency. The assigned value to this attribute is "1224". In order to be able to search by Item numbers via Z39.50, you must setup the Bib-1 attribute (1(or,u)=1224) in your Z39.50 gate configuration, as instructed in item '4. **How do I configure the Z39.50 gate in our library's ILS?**' above. However due to the filing configuration restriction in the CGP, you must search the Item Number (MARC tag 074) with no space between the Item Number & Format:

0834-W-06(online)

or,

@attr 1=1224 0834-W-06(online)

Note: There is no space between the Item Number '0834-W-06' and Format '(online)'.

Where do I find more information about the Z39.50 Attributes?

You can find the complete "Attribute Set Bib-1" at: <http://www.loc.gov/z3950/agency/bib1.html>

Or, find GPO's Z39.50 attributes at: http://catalog.gpo.gov/F/?func=file&file_name=find-z3950

Will GPO keep the library community informed about the downtime of the Z39.50 service?

The Z39.50 service is available 24 hours a day, seven days a week, except for necessary maintenance. We will keep the community informed via the FDLP Listserv and the FDLP Desktop when major downtime occurs or must be scheduled.

Keyword search difficulties using the USE attribute "50"(SuDoc Call number) - "1016" (All Keywords)

When a SuDoc number or keyword search does not return satisfactory results in a Z39.50 client, try replacing all occurrences in your search term of spaces (“ ”) with a caret symbol (“^”). For example, to search the SuDoc number “HE 20.7008:H 35”, replace the spaces with carets (^) to make it: “HE^20.7008:H^35”.

Here is another option to try:

Combine the “use” attribute “u” and the “position” attribute “p” in your configuration setting table for the CGP. This setting may allow you to search SuDoc numbers without replacing spaces with carets (^). Here is a setting example:

find xxx u=50 p=1 --->'xxx'= the code for the 086 SuDoc No. in your ILS.

In some Z39.50 free clients, you have to search the SuDoc call number using query language. For example, you can search by ‘RAW (Adv)’ in MarcEdit and by ‘PQF’ in Mercury: input a search string like this:

@attr 1=50 HE^20.7008:H^35
