

# CHAPTER 11

## Providing Access to Your Services and Data Products

There are several means by which CGDI users can access your services and data products. This chapter:

- Explains how you can provide access to your services.
- Describes the four ways you can provide access to your data products; and
- Highlights several firewall issues you may want to keep in mind.

### 11.1 Providing Access to Your Services

To provide access to your geospatial services, you must first complete the service form of the GeoConnections Discovery Portal at <http://geodiscover.cgdi.ca>. In the form, enter the URL for your service in the appropriate box. When users perform a search for a service, they receive a list of results matching their request criteria. They can then choose to visit any of the services from the list by selecting the Access button associated with that particular site. This launches the web site containing the service.

### 11.2 Providing Access to Data Products

There are four ways users can access your geospatial data products: by FTP download, HTTP access, order basket or email.

To specify how you would like users to access your data products, you will need to configure the field named "Online Linkage" in the table of FGDC fields.

You can configure this URL to enable FTP downloading of your products, email ordering of your products, order basket services for your products, or any other HTTP service that consumes your products.

### 11.2.1 FTP Download Access for a Product

When the GeoConnections Discovery Portal encounters a product with an online linkage starting with an "ftp:" scheme, it provides a Download button with the product description. When a user selects the Download button, it initiates a browser FTP connection to the address provided in the online linkage, which starts a session to download the product to the user's computer.

### 11.2.2 HTTP Access for a Product

When the GeoConnections Discovery Portal encounters a product with an online linkage starting with an "http:" scheme, it provides an Access button along with the product description. When a user selects the Access button, it initiates a browser HTTP connection to the address provided in the online linkage. The HTTP address can point to a service that is related to the product, to a static page with more information about the product, or to the actual product file (which initiates an FTP download if the product has the appropriate file extension).

### 11.2.3 Remote Order Basket Access for a Product

When the GeoConnections Discovery Portal encounters a product with an online linkage containing the string with "remoteOrder", it provides an 'Order' check-box with the product description, and an Order button next to the database summary.

The user can then select one or more products and press the Order button, which activates your order basket service and pre-populates it with the products that were checked-off.

The mask of the online linkage is as follows:

`http://<address>/remoteOrder<...>`

where:

content between braces <> is defined by the user;

address is the address of your HTTP server;

remoteOrder is the required mask that indicates that the product is available for online ordering; and

<...> is any other text or parameters that you wish to specify for the online order interface. For example, you may wish to add a parameter that passes the database name as a parameter along with the CGI call.

You must have a script on your server that has the phrase "remoteOrder" in its name. In

addition, this script must accept the parameter named "PID". This parameter is constructed into a call to your server in the following format:

```
http://<address>/remoteOrder<...>&PID=id1;id2;...
```

where **id1** and **id2** are the product IDs of the products that the user has discovered via your Search server, and has requested to order via the GeoConnections Discovery Portal interface.

If more than one product coming back from the same search points to the same order basket address, the user can select more than one product to place into the order basket for a single check-out process.

It is important to remember that the order basket and check-out services reside at your site: the GeoConnections Discovery Portal simply brokers the product discovery and selection of the products to be pushed into the order basket.

#### 11.2.4 Email Order Access for a Product

When the GeoConnections Discovery Portal encounters a product with an online linkage starting with a "mailto:" scheme, it provides an 'Order' check-box with the product description, and an Order button next to the database summary.

The user can then select one or more products and press the Order button, to activate a service to send an email message to your order desk (at the email address defined in the online linkage URL).

The "mailto" URL for an orderable product has the following format:

```
mailto:<order-desk email address>
```

Example: `mailto:order-desk@sample.com`

**Mailto** is a standard URL scheme (cf. RFC 1738. See <http://ftp.rfc-editor.org/in-notes/rfc1738.txt> for more information).

A default subject is provided to all email orders, unless a subject is provided in the "mailto" URL specification. To provide a subject in a "mailto" URL specification, use the following format:

```
mailto:<order-desk email address>?subject=<subject>
```

Example: `mailto:order-desk@sample.com?subject=email order referred from the GeoConnections Discovery Portal`

If you want the orders to go to more than one email address, simply separate the email addresses by commas.

The GeoConnections Discovery Portal handles the user interface for the user to select which products go into the order. The order will be sent to the email address(es) provided in the full URL.

The GeoConnections Discovery Portal collects the user's email address and adds it in the CC field of the email message. The sender address of the email orders is [gdp-order@ccrs.nrcan.gc.ca](mailto:gdp-order@ccrs.nrcan.gc.ca). The body of the email message contains the descriptions of the products, which the user has selected to order, the user's contact information, and any comments added by the user.

## 11.3 Firewall Issues

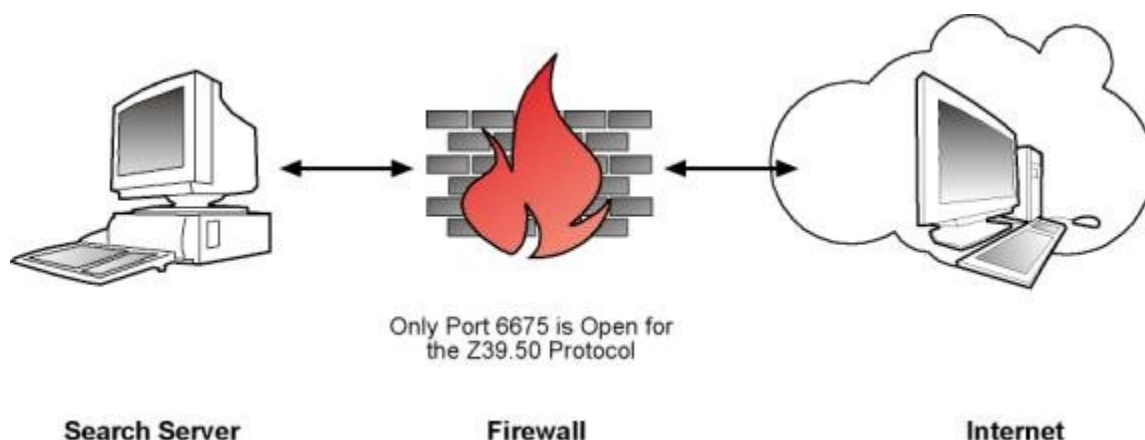
Your server sites must be connected to the Internet via a dedicated, high-speed data connection. If you have firewall or security restrictions on direct Internet connections, you may choose one of the following options:

1. Search server inside the firewall;
2. Search server outside the firewall; and
3. Mirrored copy of database outside the firewall.

### 11.3.1 Search Server Inside the Firewall

A search server inside the firewall allows restricted Z39.50 traffic through the firewall to the search server. In this case the firewall allows Z39.50 traffic to go through one specific port. The default port used for Z39.50 protocol is port 6675.

The advantage of this option is that the database connection to the server does not have to be exposed to the world. The disadvantage is that it is difficult for external users to access.

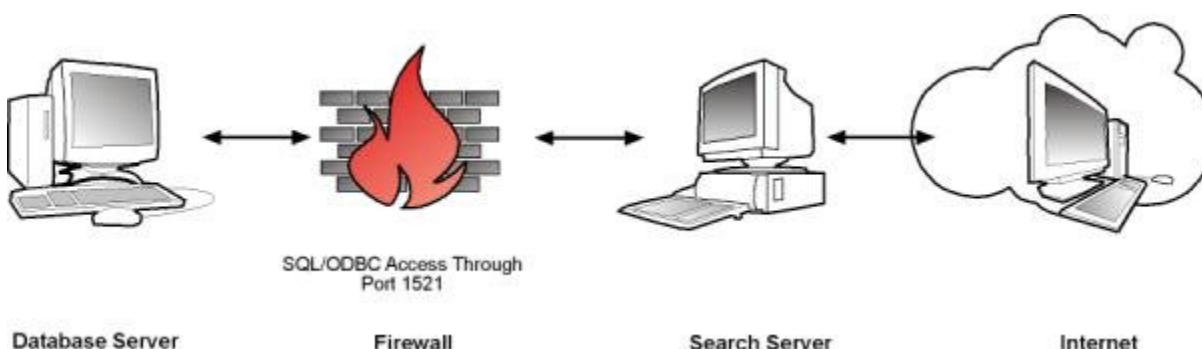


**Figure 13** Search Server Inside the Firewall

### 11.3.2 Search Server Outside the Firewall

A search server outside the firewall allows SQLNet/ODBC access through the firewall. In this case the search server accepts the queries directly from the Internet clients. The firewall allows the search server to communicate with the database located inside the firewall through port 1521 (SQLNet).

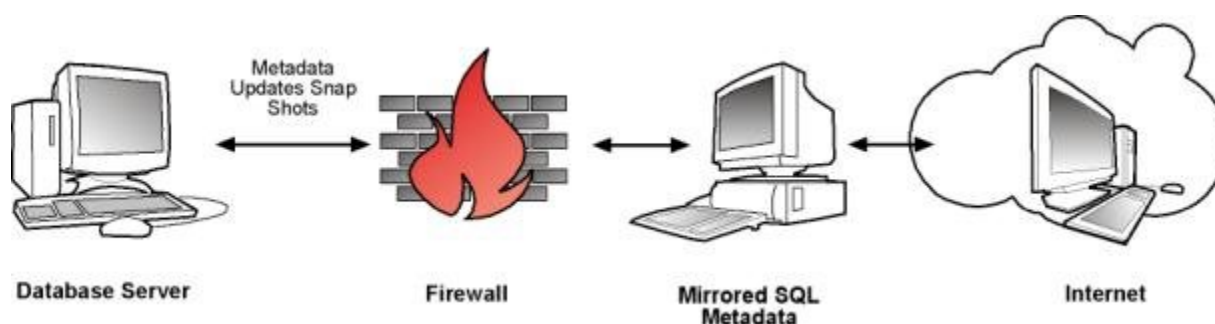
The advantage of this option is that it is easy for external users to access. However, the database connection to the server is exposed to the world.



**Figure 14** Search Server Outside the Firewall

### 11.3.3 Mirrored Copy of Database Outside the Firewall

A server containing a mirrored copy of the SQL database (including all metadata, data and GEO Profile data definitions) outside the firewall allows the following:



**Figure 15** Mirrored Copy of Database Outside the Firewall

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