

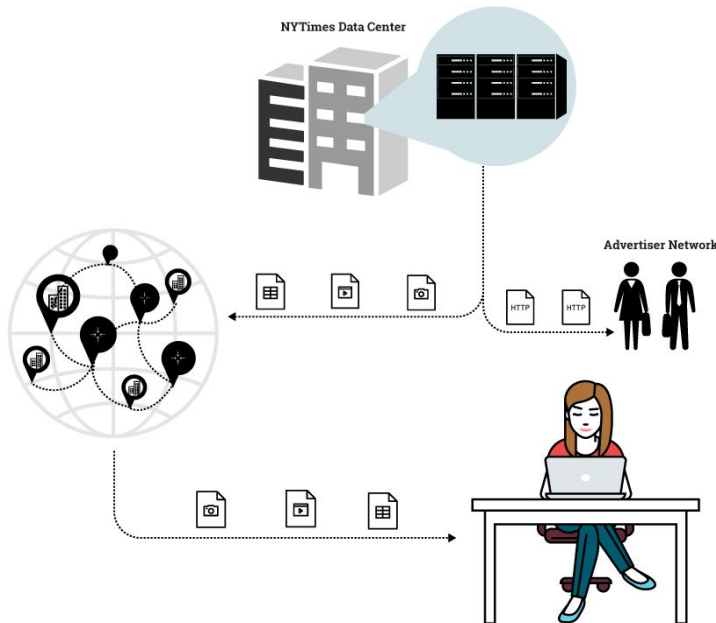
## Step 1. Library user logs on.

A web user logs in at the library home screen.

She enters her patron ID and password onto the screen. Once the library's Integrated Library System validates her log-in credentials, she can use the computer to access the web.

## Step 2. Http request travels "locally."

The user types a url—for example, <http://www.nytimes.com>—in the web browser. This address or http request is sent through the library's router and travels from the router to the modem. The requested website is transmitted as information packets, and as secure if https is included in the address. Packets can include other information in addition to the request, such as a password and username (see below, Step 5b.).



### Step 3. Request travels to ISP.

Like a home modem, the library modem connects to an Internet Service Provider (such as Time Warner Cable or Verizon) by a series of cables. The requested web site travels as information packets through these cables to the Internet Service Provider.

### Step 4. Request travels the internet.

The ISP is connected by cables to a hub called an internet router. This hub connects via cables to other hubs, creating a network of networks that make up the Internet.

Domain name servers dot these networks, checking whether the requested website is valid. If not, the domain name server sends back an error message to the device where the computer sits. If yes, the web site request travels through various hubs until it reaches its destination – the web host.

### Step 5. Host found, answers request.

The web host can contain just one web server or multiple ones. The request in this example will pull information from the web servers with the nytimes.com address.

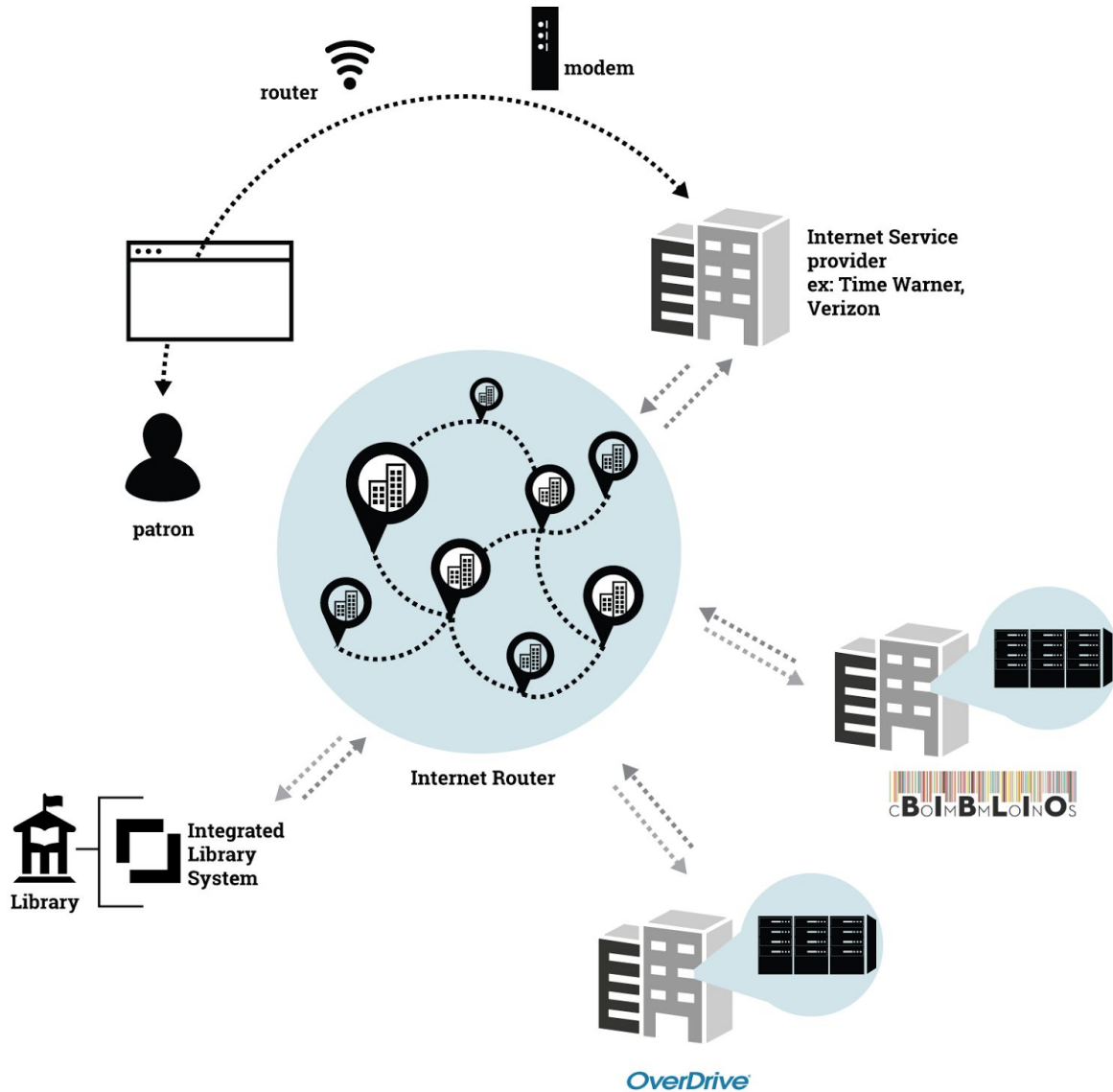
Once the request is received, the web server for The New York Times sends back the requested information in a series of packets. These packets can include photo files, articles, or videos, as well as other http requests (for content hosted elsewhere by a third party, including advertisements).

### End. Library user logs out.

Once the web surfer is finished with her session, she will log out, or, if time runs out, she will be automatically logged out from the computer session via the library's reservation software. Browser history and cookies are cleared, and temporary files are purged.



## Dataflow: Checking out an Ebook



**Step 1:** Find a book through Bibliocommons, which communicates with the ILS

**Step 2:** Checkout the book on the ILS through Bibliocommons

**Step 3:** Read the book using OverDrive (for example), which communicates with the ILS