Brandeis Wired Ethernet

How to put devices on the network; how to name devices; how to check a device’s status.

Most of this involves interacting with services being maintained by ITS.

As of January 2019 the process for registering computers is changing. Instructions need to be revised...

Getting an IP address

IP addresses on the wired network can be managed through the web application at netreg.brandeis.edu.

- devices not yet registered are usually redirected there when detected on the wired network.
- all new computers, printers, and other devices that go on wired ethernet should be registered manually - best to ask the Div Sci Tech group for help registering.
- devices are identified by their ethernet hardware address.

If you are going to connect through the network to your computer, you need to assign it an effectively static IP address.

Pooled subnets

In some buildings, subnets coexist. To target a device to a particular subnet (other than the default), an administrator must create an entry in the wireless prefixes section of netreg.brandeis.edu using the rules below.

The Ethernet HW address should be pasted with colons in the string in the wireless prefixes table.

<table>
<thead>
<tr>
<th>Building/area</th>
<th>Default subnet</th>
<th>Other subnets</th>
<th>Rule name(s)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bassine</td>
<td>129.64.50.</td>
<td>129.64.49.</td>
<td>BASSINE49-ACCESS-ROLE-B</td>
<td></td>
</tr>
<tr>
<td>SSC Lower 3 floors</td>
<td>129.64.111.</td>
<td>129.64.112. 129.64.113.</td>
<td>SSC112-ACCESS-ROLE-B</td>
<td></td>
</tr>
<tr>
<td>SSC Upper 2 floors</td>
<td>129.64.114.</td>
<td>129.64.115.</td>
<td>SSC115-ACCESS-ROLE-B</td>
<td></td>
</tr>
<tr>
<td>Volen lower floors</td>
<td>129.64.55. (???)</td>
<td>129.64.2. 129.64.3. 129.64.46.</td>
<td>VOLEN2-ACCESS-ROLE-B</td>
<td>2, 3, 46 are for Co Sci only</td>
</tr>
<tr>
<td>Abelson-Bass</td>
<td>129.64.54.</td>
<td>129.64.37. 129.64.52.</td>
<td>HEP-ACCESS-ROLE-B</td>
<td>129.64.37.[42-100] allocated only for HEP development</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ASTRO-ACCESS-ROLE-B</td>
<td></td>
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<tr>
<td>Rosenstiel</td>
<td></td>
<td></td>
<td>ask R Lynn Rardin</td>
<td></td>
</tr>
</tbody>
</table>

When assigning a device to a new role, you need to make sure the network hardware updates it. Disconnecting the ethernet cable for at least FIVE minutes before reconnecting will do this.

- A device only has one role. When possible, do not assign one of the roles above to a printer as it will prevent it from being treated as a printer (and included in the firewall settings).
- In most cases, it does not matter which subnet a computer is in. However, communications among computers in a lab is often easiest (due to defaults in Windows and OS X) if all the computers are in the same subnet.
- The information in this article pertains to academic buildings at Brandeis and particularly the Science Complex.
- There is no wired ethernet service in the dorms. Users who are asking for wired ports due to wireless connectivity issues should contact the help desk to have their wireless issues addressed.

Getting a DNS Name
Dynamic Names

- are assigned based on the nicknames stored in netreg.brandeis.edu – it is unclear to me if this is entirely functional at present (Feb 2018),

Static Names

- Names are assigned to specific IP addresses through Amazon Web Services
- If you would like your computer to have an easy-to-remember name, ask the Div Sci Tech group for help assigning you one.