

# FSILG IT 101, Network Contact Handout

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## **Assigning static IP addresses:**

**Valid Moira entries:** No computer or network device in your ILG should have a static IP address that does not have a corresponding valid entry in moira. Valid entries have:

- an IP address allocated from the pool of static IP addresses available (not from the DHCP pool)
- complete and accurate owner and contact information

### **Follow guidelines in the Quick Guide**

**Public computers** should be assigned to a list (preferably the network contact list.)

- In Moira, Owner Type = LIST, Owner = ht-*<ilg>*-acl

**Assign a unique IP address:** Moira will automatically assign the next available IP address if you select **unique**. This will help:

- Avoid IP address conflicts
- Avoid accidentally using IP addresses in the DHCP pool

**Moving an IP address to or from a dorm:** ILG network contacts do not have permissions to make changes to hostnames in the dorms. The best way to make these moves is to email [ilg-net-help@mit.edu](mailto:ilg-net-help@mit.edu)

**Deleting a hostname after a resident leaves or graduates:** If a resident no longer needs an IP address you can set the status of the hostname to *deleted*. Please follow the instructions in the quick guide to “delete” a hostname.

## **Guests, Visitors and Summer Residents:**

**Short term visitors,** those that will be at the house for less than two weeks, should register as visitors with the MIT DHCP registration system.

**Long term visitors** are not guaranteed access to the MIT network by IS&T. If a house has determined that a visitor or summer resident should have access to the network, that person should be assigned a static IP address.

- The owner of the static IP record in moira should be the network contact list.
- The contact information for the IP address should be the visitor's valid email address.

**Note on subletting:** Many houses or residents are known to tell sub-lessors that internet connectivity is included with the room. MIT Information Services and Technology does not automatically provide network connectivity for anyone except MIT students and staff members. The decision to allow summer residents onto the network is made by the house members. The house must then take responsibility for the machine and any support it needs.

## **Public and Common room Computers:**

Computers that are accessed by all members of the house and by visitors can be tricky. These machines are easily infected with viruses or malicious software and the entire house may be responsible for what happens on these computers. Running **file sharing applications** on these computers is a **bad idea**.

**Be sure to clean these machines as often as possible:** It's a good idea to have an image that you can use to wipe the computer once in a while. It can be difficult to identify a compromised computer. Wiping it clean will help prevent long-term infection or compromise.

## **Troubleshooting and escalation:**

The most effective way to troubleshoot a network problem in your house is to first assume the problem is **not** with the connection to MIT. If you wait for IS&T to respond to a building outage request before troubleshooting the internal network it can make the process longer than needed.

- **Gather as much information as possible:** Try to keep a written record of what has been tried. Keeping track of what network equipment has been tested, what status indicator LEDs are lit, what times problems occurred and any other details can be important in quickly determining and resolving the problem.
- **Try multiple possibilities:** Make sure to test an extensive collection of alternatives.
  - Test multiple ethernet cables, multiple computers, using DHCP and a static IP
- **Look for common factors** shared by affected computers and residents:
  - Are all of the residents affected connected to the same internal switch?
  - Does this only affect computers configured to use DHCP?
  - Does this only affect wired or wireless connections or both?
- **Escalating to ILG net help:** If you cannot find the source of
- the problem, escalate to ILG net help via phone or email. Make sure to have detailed troubleshooting information ready. The ILG network coordinator is sure to ask questions regarding the LEDs on the MIT switch, what options have been tried and what times problems began to occur.
  - [ilg-net-help@mit.edu](mailto:ilg-net-help@mit.edu)

## **Incident Response:**

- **DMCA violation complaints:** The ITSS (Information Technology Security Support) Team will send out DMCA violation notices to the network contacts if a machine is found serving copyrighted material on your house network. Be sure to respond to these messages quickly and alert the resident responsible.
- **Security notifications:** ITSS will also send out notices if there is a security breach or compromised computer on your network. Do not let these messages go by without action and response.
- **Keep operating systems patched:** Computers on the MIT network are **open** to the internet. Keeping machines patched is very important to keep it secure and to keep the entire network healthy. One un-patched machine can lead to a virus spreading throughout a network, denial of service attacks, unsolicited serving of copyrighted music/movies and worse.
- **Anti-virus software:** MIT provides versions of McAfee AntiVirus clients for Linux, Windows and OSX. Please see the software download pages at: <http://web.mit.edu/software>.

## **MIT and Verizon equipment:**

The network connection provided to your house may be directly through MIT or it may pass through Verizon's network first depending on your proximity to the MIT campus.

- **Multiple ports available:** You can use any of the ports on the MIT device to connect your house residents or house equipment.
- **MIT equipment replacement:** Please be careful around the MIT and Verizon equipment. Your house will be responsible for paying for equipment that needs replacement due to negligence, ill will or mistreatment. Try to keep food, drinks and liquids of any kind away from the equipment installed in your house.
- **Do not power cycle:** Maintain power and connectivity to these devices at all times. Do not turn off or reset the MIT or Verizon equipment in your house. Doing so can increase the time needed to diagnose and resolve a problem or lower the priority of an outage.