
FOSSRIT Runbook

Release 1.0.0

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This is the main page for the FOSSRIT Runbook. Other pages are available for you to navigate and explore below. For more information, see the [repo on GitHub](#).

RESPONSIBILITIES AND CONTACTS

This page documents administrative responsibility and contact information for the FOSS@RIT community. Generally, there are two separate entities: **FOSS@RIT** and **FOSS@MAGIC**.

1.1 FOSS@RIT

FOSS@RIT usually means the wider free/open source community at RIT. This includes organizations and groups such as the following:

- Free/Open Source Software initiative at RIT MAGIC Center
- RIT Linux Users Group
- Computer Science House
- Sustainability at RIT

However, the FOSS@RIT identity is not exclusive. It is not “owned” by any single group or organization. Generally, anyone who works in free/open communities at RIT, not limited to software, is included in this identity.

See Prof. Deeje’s blog post with suggestions on how to get involved with the FOSS@RIT community: [Joining RIT@FOSS](#)

1.1.1 Responsibilities

Responsibilities associated with the FOSS@RIT community are typically on a volunteer basis and informal. This list is not exhaustive and will change over time, as older folks move on and new folks get involved.

- Moderating *IRC channels* on Freenode
- Moderating Matrix/Riot chat rooms
- Moderating *Telegram groups*
- Moderating *fossrit.community Discourse* discussions
- Maintaining open source projects on FOSSRIT GitHub organization

1.1.2 Community contacts

The table below documents who the best person to contact is for different parts of the FOSS@RIT community:

1.2 FOSS@MAGIC

FOSS@MAGIC is the Free/Open Source Software initiative at the RIT Center for Media, Arts, Games, Interaction, and Creativity (MAGIC). More details about FOSS@MAGIC are available on the [official website](#). Anything associated with FOSS@MAGIC is directly connected to RIT and the MAGIC Center.

1.2.1 Responsibilities

Responsibilities associated with FOSS@MAGIC are typically related to accounting or event organization. This list is not exhaustive, but should remain fairly consistent as most of these responsibilities are associated to paid faculty and staff of RIT:

- Accounting
 - Domain names (e.g. `fossrit.community`, `teleirc.com`)
 - Infrastructure services (e.g. DigitalOcean)
- Event organizing
 - Booking rooms/space for meetings (e.g. FOSS Hours, TeleIRC developer meetings)
 - Ordering food/beverages

1.2.2 MAGIC contacts

The best points of contact for FOSS@MAGIC are [Prof. Stephen Jacobs](#) and [Brenda Schlageter](#). Jacobs is the formal head of the FOSS@MAGIC initiative, while Schlageter is the Operations Manager of the MAGIC Center. The best way to get in touch with FOSS@MAGIC staff is via email.

Send an email to the below address to get in contact (obfuscated to reduce spam from web-scraper bots):

`foss [at] rit [dot] edu`

ELECTION NIGHT HACKATHON: ORGANIZER'S GUIDE

This page is an organizer's guide for the **RIT Election Night Hackathon** (ENH). It provides context on what the ENH is, how to organize one, and a historical reference of past ENHs.

2.1 What is it?

ENH is a traditional event hosted by FOSS@MAGIC every November on Election Night in the United States. It is a night to celebrate the tradition of democracy in the United States by working on civic-focused projects (or in many cases, assignments due the next day). While projects are often technology-focused, the scope is beyond technology too. It is also a place for our community to gather and make connections with folks who do not typically participate in the wider FOSS@RIT community.

2.2 How to organize

Sections below are in sequential order.

2.2.1 Reserve venue

First, reserve a venue for the ENH. Attendance varies depending if it is a presidential election year or not. On presidential election years, attendee counts are around 100 people. On midterm election years, attendee counts are between 10 to 30 people. Choose a venue accordingly.

Typically, venue logistics are worked out in partnership with the RIT MAGIC Center.

2.2.2 Set up RSVP system

Next, set up some sort of system to collect RSVPs for the event.

Historically we have used Eventbrite for this. The Eventbrite account is a personal account for individual student employees; there is not a shared FOSS@MAGIC Eventbrite account. However, note discussion about switching to the Meetup.com platform in [FOSSRIT/tasks#112](#). Whichever system is used, the only critical requirement is a free and easy way for community members to RSVP with an email address so we can order an appropriate amount of food.

2.2.3 Publish ENH on FOSS@MAGIC website

The ENH needs an event profile on the FOSS@MAGIC website. This provides us a static link to share for community outreach and promotion. See [Website - How to create event profiles](#) for how to do this.

2.2.4 Promote ENH

Once the event profile is published and RSVP system is in place, begin promoting the event. Typically we share the event profile on the FOSS@MAGIC website in the following places:

- [FOSSRIT Discourse](#)
- [FOSSRIT mailing list](#) (technically retired, but some people still hang out only here)
- [RIT subreddit](#)
- [Rochester subreddit](#)
- Various community Slacks (ask community for help on this one!)
 - [codeRIT Slack](#)
 - [RITlug Slack](#)
 - [Women in Computing Slack](#)

2.2.5 Reach out to community organizations

Sometimes we partner with local community organizations for the ENH. For example, in 2019, a hackathon activity involved transcribing suffragist papers in collaboration with the Smithsonian and the Library of Congress. We have also partnered with other organizations like WXXI and [Second Avenue Learning](#).

Ask for support from FOSS@MAGIC staff on this task.

2.2.6 Recruit volunteers

Having 3-4 volunteers for the night makes life as an organizer much easier. Volunteer responsibilities typically include the following:

- Help unpack food when it arrives
- Run registration desk / check-in arriving participants
- Provide/share stickers near registration desk
- Set up tables / power sources, if applicable
- Answer questions from attendees, direct to someone who can help if they cannot

It is not a lot of work and when there are a few people helping out, it reduces the stress factor significantly. Publish an announcement on the FOSS@MAGIC website with a Google Form for volunteer sign-ups. Usually a firm schedule is not necessary, but make sure to get an idea of how long each volunteer can spend at the hackathon. Get final confirmations from volunteers about 1-2 weeks before the ENH.

2.2.7 Pre-order food/drinks

The afternoon of the ENH, pre-order food and drinks based on current RSVP counts. Note from past experience, a lot of RSVPs will not show and there will be a fair amount of people who walk in by chance. Try to accommodate diverse dietary needs *especially* if ordering pizza, e.g. gluten-free options, vegan options, vegetarian pizzas, etc.

It could be a good idea to include this as a registration question in the RSVP system in the future.

2.2.8 Prepare kick-off materials

Prepare an introductory slide deck and any speaker notes to kick off the ENH. This happens in the first 30 minutes of the hackathon. It usually includes the following:

- Introduction to FOSS@MAGIC
- Introduction to any partner organizations
- Logistics for the evening
 - Share public lists of resources, if any (e.g. links to civic APIs, public data sources, etc.)
 - When hacking ends
 - When project demos begin
 - Details on prizes, if any (we usually don't though)

This is usually led by FOSS@MAGIC staff, but there is no reason why a student volunteer cannot help co-lead this part too.

2.2.9 Have fun!

Have fun and let the hacking begin! Coordinate with volunteers as needed depending on overall crowd size. If it is a presidential election year, be mindful of building fire code for how many people can be in one space at a time.

2.3 Historical archive

This section is an informal collection of blog posts, tweets, event reports, and other media related to the Election Night Hackathon at RIT:

2.3.1 2019

- 2019-11-05: [Election Night Hackathon 2019](#) (Justin W. Flory)

2.3.2 2018

- 2018-12-08: [2018 In Review](#) (Jeffery Russell)
- 2018-11-06: [Election Night Hackathon 2018](#) (Justin W. Flory)
- 2018-11-06: [8th Annual Election Night Hackathon - 2018 midterms](#) (hackathon.com)

2.3.3 2017

- 2017-12-11: [Election night hackathon supports civic engagement](#) (Justin W. Flory)
- 2017-11-13: [“Where can I vote?” — RIT Election Night Hackathon 2017](#) (Chris Bitler)

2.3.4 2016

- 2016-12-14: [Students and professors work across the aisle during Election Night Hackathon](#) (Justin W. Flory)
- 2016-11-07: [Election Night Hackathon](#) (ervina)
- 2016-10-25: [Election Night Hackathon: November 8, 5pm-11:30pm](#) (RITlug)
- 2016-10-18: [Hack the elections! Annual Election Night Hackathon @ MAGIC Center](#) (Reddit)

2.3.5 2015

- 2015-11-03: [RIT MAGIC Center on Twitter: “Our 5th annual election night hackathon is in full swing...”](#) (RIT MAGIC Center)

2.3.6 2014

- 2014-12-02: [Election Night Hackathon 2014](#) (Matt Soucy)

2.3.7 2013

- 2013-08-28: [Election Night 2013](#) (Remy DeCausemaker)

2.3.8 2011

- 2011-11-06: [RIT Election Night Hackathon](#) (Remy DeCausemaker)

2.3.9 2010

- 2010-11-04: [Election Night Hackathon 2010](#) (Remy DeCausemaker)

EXHIBITION CHECKLIST

This page is a checklist for important tasks for FOSS@MAGIC community members to follow before a public exhibition or show. On a semester-to-semester basis, this usually means the [Maker Faire Rochester](#) and [Imagine RIT](#). Occasionally, it may include a booth at a major computing conference, like [OSCON](#).

3.1 Purpose

Exhibitions, trade shows, and conferences are important opportunities to showcase our community to people outside of RIT. Around the year, students, faculty, and staff are doing cool things with open source. We might be familiar with it being on campus, but sharing our work with others is an important part of getting our work out there to the world. This also provides students a chance to show off some of their work to prospective employers or community leaders.

Therefore, it is important to maintain a respectful and professional attitude for our exhibitions at different events. They are as much a chance to promote FOSS@MAGIC as they are to promote work and efforts by individual members of our community.

3.2 Staffing requirements

Minimum two people *must* staff a booth/table during an exhibition. Three people is recommended and preferred.

Everyone who volunteers to staff a FOSS@MAGIC booth should also have time to go around the conference, go to talks or workshops, and of course use the bathroom. Keeping two to three people at the booth avoids one person taking everyone's questions and getting exhausted. Be kind to your fellow volunteers and try to be flexible so everyone has a chance to volunteer at the booth, but also experience the event as an attendee too.

3.3 Preparation checklist

Sections below are in sequential order.

3.3.1 Publish call for projects on FOSS@MAGIC website

- **What:** Make a new announcement on FOSS@MAGIC website to ask community members to submit projects for exhibition (or get help on starting projects)
- **Who:** FOSS@MAGIC staff, or student volunteers asked by FOSS@MAGIC staff
- **When:** About 4 months before event
- **Where:** [FOSS@MAGIC website - Announcements](#)
- **Why:** Build community interest for upcoming event and support prospective exhibitors in their project work during the semester
- **How:** See [Website - How to create announcements](#)

3.3.2 Submit event registration

- **What:** Submit application form to attend an event/conference as an exhibitor
- **Who:** FOSS@MAGIC staff, or student volunteers asked by FOSS@MAGIC staff
- **When:** Typically 3-4 months *before* event (check event website for deadlines)
- **Where:** Event/conference website
- **Why:** In order to get a booth to exhibit, we need to apply and pay any fees, if required
- **How:**
 - Events we frequently attend have copy+paste text available in FOSS@MAGIC Google Drive
 - However, most info we submit is also found on our [public website](#) (see [About](#) and [Projects](#))

3.3.3 Add exhibited projects to FOSS@MAGIC website

Any project we exhibit at an event needs a project profile on the FOSS@MAGIC website. See [Website - How to add projects](#) for how to do this.

3.3.4 Add event to FOSS@MAGIC website

Any event, conference, or show we attend needs an event profile on the FOSS@MAGIC website. The website does not support recurring events, so each individual event should get its own profile. See [Website - How to create event profiles](#) for how to do this.

3.3.5 Pack inventory for exhibition booth

- **What:** Pack supplies, hardware, and other inventory for an exhibition booth
- **Who:** Booth volunteers
- **When:** 1-2 days before event travel
- **Where:** In RIT MAGIC Suite / Prof. Stephen Jacob's office
- **Why:** To prepare for the exhibit and **test all hardware BEFORE event to avoid on-site problems on event day**
- **How:** Assemble the following items:

- Tablecloth (x1)
- Printed brochures/handouts (as available, *ask FOSS@MAGIC contacts* for guidance)
- Laptops (x2)
- Monitors (x2)
- USB keyboard (x1)
- USB mouse (x1)
- Any physical projects to be exhibited

Inventory tips

- Hardware like monitors, keyboards, and mice are more useful for events with less travel involved (e.g. Maker Faire Rochester and Imagine RIT). For industry conferences with longer travel and less storage, taking this hardware may be less feasible. For conferences, consider some items above based on need and venue logistics.
- Exhibit laptops typically need access by whoever is at the booth. Suggest turning off automatic screen-lock or creating a temporary shared password/account.
- If monitors not available, use laptops for demoing. Note this means many hands on a device, so make sure device owner is okay with this first.

3.3.6 Set up exhibition booth

- **What:** Set up inventory and booth for event
- **Who:** Booth volunteers
- **When:** Day of event
- **Where:** Event venue
- **Why:** To make an awesome display and get people to ask questions about what we do
- **How:**
 1. Spread tablecloth out, if event does not provide one
 2. Set up each laptop with a monitor on opposite ends of table
 3. Display [FOSS@MAGIC website](#) on one monitor and other project work on other monitor
 4. Set up hardware projects in center of table
 5. If missing equipment or need supplies from outside the venue, *contact FOSS@MAGIC staff* immediately
 6. Make loose plans with all volunteers for who will be present at table when, when lunch break is, etc.
 7. Take group photo with all volunteers / staff
 8. Get lunch funds from FOSS@MAGIC staff, if applicable
 9. Go! You got this. Have fun!



3.4 Post-event

- Add event photos to event profile on FOSS@MAGIC website (see *Website - How to create event profiles* for help)
- *Optional:* Write a blog post recap of how event went, share blog link on *FOSSRIT Discourse forums*

FOSS@RIT TECH TEAM

This page explains what the FOSS@RIT Tech Team is, the responsibilities of the team, and where to contact the Tech Team.

4.1 What is Tech Team?

The FOSS@RIT Tech Team is a group of FOSS@MAGIC staff, RIT faculty, students, and alums who support the infrastructure and digital services of the FOSS@RIT community. The Tech Team was launched in Spring 2020, as part of an [open call for volunteers](#) for FOSS@MAGIC. The team is volunteer-driven and loosely under the leadership of FOSS@MAGIC staff.

For information about joining the Tech Team, see [Joining Tech Team](#).

4.2 Responsibilities

Generally, the FOSS@RIT Tech Team assists with these areas:

- Infrastructure management and administration (more info in [Infrastructure and services](#) of the Runbook)
- Software development
- Peer reviews (on code/infrastructure pull requests)
- Early access to FOSS@MAGIC technology experiments

4.2.1 Projects

Examples of projects the Tech Team focuses on are listed below:

- **FOSSRIT/foss-profiles**: Generate a web page for FOSS@RIT community members from YAML profiles
- **FOSSRIT/fossrit.github.io**: Official website for Free and Open Source Software @ RIT MAGIC Center and FOSS academia
- **FOSSRIT/infrastructure**: Set of scripts, Ansible playbooks/roles, and other tools to automate and manage FOSS@MAGIC infrastructure
- **FOSSRIT/runbook**: Documentation and information about the Free and Open Source community at RIT, facilitated by RIT MAGIC Center
- **RITlug/teleirc**: Telegram <=> IRC bridge for use with any IRC channel and Telegram group

4.3 Contact

The FOSS@RIT Tech Team is on Discourse, IRC, and Telegram. Come say hi!

- **Discourse:** [FOSSRIT - Projects](#)
- **IRC (Freenode):** [#rit-foss-admin](#)
- **Telegram:** [@fossrit_techteam](#)

JOINING TECH TEAM

This page provides guidance for new volunteers and maintainers on how to bring new people into the FOSS@RIT Tech Team. It is assumed you already read the *FOSS@RIT Tech Team* documentation.

5.1 For new volunteers

1. Fill out the [volunteer sign-up form](#)
2. Join the IRC/Telegram chat and say hello, briefly introduce yourself
3. Keep an eye out for email follow-up from a Tech Team maintainer

5.2 For maintainers

This section describes the process for Tech Team maintainers or FOSS@MAGIC staff to bring new people into the Tech Team.

1. Conduct a 30 minute, 1x1 interview with new volunteer about why they want to get involved, their interests, and anything they think is important for FOSS@MAGIC to work on
2. Invite them to Tech Team chat groups / Discourse forum
3. Invite them to recurring meetings, or if meeting time not decided yet, send them a poll for choosing the best time
4. After their participation in first meeting, add them to relevant GitHub org groups
5. Communicate regularly and run occasional check-ins to see if new volunteer is getting what they want out of participating and if there is anything that could be improved

NOTE: Participation in the meetings is critical and all members of the Tech Team should make an effort to attend these meetings. This is one of the few opportunities for everyone to check in together, see how things are going, and raise issues to the rest of the group. When bringing on new members, emphasize the importance of these occasional meetings and ensure they understand the importance of committing to these meetings.

ANSIBLE

This page documents the Ansible configuration management repository at [FOSSRIT/infrastructure](#). Any changes to services or applications managed on FOSS@MAGIC infrastructure are managed in this git repo.

6.1 Contact information

- **Owner:** FOSS@MAGIC Tech Team
- **Contact:** [#rit-foss-admin](#) / [#rit-foss-admin:matrix.org](#) / [telegram.me/fossrit_infra](#)
- **Persons:** [Justin W. Flory](#), [Tim Zabel](#)
- **Location:** Toronto, Canada (TOR1)
- **Purpose:** Configuration management for FOSS@MAGIC infrastructure.

6.2 Background

The FOSS@MAGIC Tech Team uses Ansible for system change management. Previously, no configuration management tool was used for our infrastructure. Some git commits go back to 2013 for a few scripts used back in the day, but the migration to Ansible started in September 2018.

6.3 Overview

Ansible playbooks are run locally by a system administrator. A system administrator can run Ansible playbooks once a user and SSH key is set up for them on the host. New SSH keys and users are defined in the `sshd` role (see [Roles](#)).

Playbooks are idempotent (or should be). Meaning you should be able to re-run the same playbook over and over and it should get to a state where 0 items are changing.

6.4 git repo

There is one repository associated with Ansible, [FOSSRIT/infrastructure](#). This is a public repository. Private data is stored via encryption with [Ansible Vault](#). The encryption passphrase is shared on a need-to-know basis with infrastructure maintainers.

It is recommended to configure `git` to use `pull --rebase` by default. Do this with the following command in your local clone of the infrastructure git repo:

```
git config --bool pull.rebase true
```

This prevents unneeded merges which can occur if someone else pushes changes to the repository while you are working on your own local changes.

6.5 Directory setup

6.5.1 Inventory

The `inventory/` directory tells Ansible what hosts are available and any groups they belong to. All files in this directory are concatenated together, so you can split out groups/hosts into separate files for readability. They are in `ini` file format.

Additionally, under the inventory directory are `host_vars/` and `group_vars/` subdirectories. These are files named for the host or group and containing variables to set for that host or group. You should strive to set inventory variables in the highest level possible, and precedence is in:

- Global
- Group
- Host order.

6.5.2 Vars

This directory contains global variables as well as OS specific variables. Note that in order to use OS-specific variables, you must have `gather_facts` as `True` or Ansible will not be able to determine the OS.

6.5.3 Roles

Roles are a collection of tasks/files/templates that can be used on any host or group of hosts that all share that role. In other words, roles should be used except in cases where configuration only applies to a single host. Roles can be reused between hosts and groups and are more portable/flexible than tasks or specific plays.

6.5.4 Scripts

The `scripts/` directory includes miscellaneous utility scripts for sysadmins.

6.5.5 Playbooks

There is a `playbooks/` directory where YAML playbooks are stored. The top level contains utility playbooks for sysadmins. These playbooks perform one-off functions or gather information. Under this directory are `hosts/` and `groups/` playbooks. These playbooks are for specific hosts and groups of hosts, from provision to fully configured. You should only use a host playbook in cases where there will never be more than one of that thing.

6.6 Additional resources

- Upstream docs
- Examples:
 - github.com/ansible/ansible-examples
 - gist.github.com/marktheunissen/2979474
- Jinja docs

CHAT BRIDGES

This page documents the bridge services maintained by the [FOSS@RIT Tech Team](#). Chat bridges are used to “bridge” different chat rooms together (e.g. a Telegram group to an IRC channel).

7.1 Matterbridge

[Matterbridge](#) is an open source chat bridge that supports various chat platforms. Currently, FOSS@RIT uses it to connect the [RITlug Slack](#) to IRC channels on Freenode (see [IRC \(Freenode\)](#)).

7.1.1 Maintenance

The FOSS@RIT Matterbridge instance is deployed on [RITlug](#) infrastructure hosted in RIT’s Institute Hall data center. Configuration and deployment details are managed in [FOSSRIT/infrastructure](#) as an [Ansible Role](#). The upstream Ansible Role is maintained at [jwflory/ansible-role-matterbridge](#).

7.1.2 Upgrading

Upgrading Matterbridge requires changing two variables in the Ansible Role:

1. Version number (`matterbridge_config.version`)
2. Binary checksum (`matterbridge_config.binary_checksum`)

Both the version and binary checksum are found on Matterbridge’s [releases page](#). You can find the binary checksum in the `checksums.txt` file, attached as an artifact to Matterbridge releases. We use the hash for the `linux-64bit` compiled binary.

See the following pull requests for examples:

- [FOSSRIT/infrastructure#59](#)
- [FOSSRIT/infrastructure#66](#)
- [FOSSRIT/infrastructure#76](#)

7.2 TeleIRC

TeleIRC is an open source chat bridge for connecting Telegram groups to IRC channels. It is maintained by the [RIT Linux Users Group](#). Currently, FOSS@RIT uses it to connect various Telegram groups to IRC channels on Freenode (see [Telegram](#), [IRC \(Freenode\)](#)).

7.2.1 Maintenance

All FOSS@RIT TeleIRC instances are deployed on [RITlug](#) infrastructure hosted in RIT's Institute Hall data center. Configuration and deployment details are managed in [FOSSRIT/infrastructure](#) as an [Ansible Role](#). The upstream Ansible Role is maintained at [jwflory/ansible-role-teleirc](#).

7.2.2 Upgrading

There are two types of upgrades: TeleIRC and the Ansible Role.

TeleIRC

Only one variable in the Ansible Role needs to be changed in most cases: `default_version`. Change this variable to the targeted version and run the Ansible playbook to deploy the update.

See the following pull requests for examples:

- [FOSSRIT/infrastructure#55](#)
- [FOSSRIT/infrastructure#63](#)

Ansible Role

Occasionally the upstream Ansible Role will change. When this happens, the Ansible Role needs to be upgraded in the downstream repository, i.e. [FOSSRIT/infrastructure](#). The upgrade can be done from the root directory of the repo with the following commands:

```
ansible-galaxy role install --force jwflory.teleirc
git checkout HEAD roles/jwflory.teleirc/vars/{main,vault}.yaml
```


An example of an upgrade is found in [FOSSRIT/infrastructure@75c0bbc](#).

DIGITALOCEAN

This page documents the DigitalOcean team and infrastructure used for FOSS@MAGIC.




8.1 Team

There is a *FOSS @ RIT MAGIC* team registered in DigitalOcean's admin interface. The DigitalOcean team is a shared group of accounts with direct access to the DigitalOcean Droplets:

 **FOSS @ MAGIC** DEFAULT
Web Application / Production / Infrastructure for Free and Open Source Software initiative at RIT MAGIC ...
[→ Move Resources](#)

Resources Activity Settings

DROPLETS (1)




  fossrit.community	165.227.44.154	discourse + 2	 ...
---	----------------	---------------	---

8.1.1 Access

Currently, three people have access to the shared *FOSS @ RIT MAGIC* DigitalOcean team:

- Brenda Schlageter
- Justin W. Flory
- Stephen Jacobs

3 Members [Invite Members](#)

Name	Role	Status	Sign-in method	
 Justin W. Flory (you)	Owner	Joined	Email + 2FA	...
 Brenda Schlageter	Owner	Joined	Email	...
 Stephen Jacobs	Member	Pending	—	...

8.1.2 Billing

FOSS@MAGIC covers the expenses for the Droplets on a monthly basis. This is set up with automatic billing to the RIT MAGIC Center via an RIT-managed credit card.

8.2 Droplets

Droplets are the billable “unit” in DigitalOcean. They represent a specific service or server.

8.2.1 Services

Currently, only one service is hosted as a DigitalOcean Droplet:

- [Discourse](#)

The Discourse Droplet is configured with automatic snapshot backups, taken once a week:

Backups

Backups are currently enabled. They are scheduled to start weekly Friday 3 PM to Saturday 2 PM (EST).

Backups for this Droplet cost \$2.00 per month.

[Disable Backups](#)

Droplet backups



fossrit.community 2020-01-25

Backup created 1 month ago

[More](#) ▾



fossrit.community 2020-02-01

Backup created 19 days ago

[More](#) ▾



fossrit.community 2020-02-08

Backup created 12 days ago

[More](#) ▾



fossrit.community 2020-02-15

Backup created 5 days ago

[More](#) ▾

DISCOURSE (FOSSRIT.COMMUNITY)

This page documents the Discourse service used for our community forums at fossrit.community. Discourse is where anyone may share topics for discussion with the wider FOSS@RIT community.

9.1 Contact information

- **Owner:** FOSS@MAGIC Tech Team
- **Contact:** [#rit-foss-admin](#) / [#rit-foss-admin:matrix.org](#) / [telegram.me/fossrit_infra](https://t.me/fossrit_infra)
- **Persons:** [Justin W. Flory](#)
- **Location:** Toronto, Canada (TOR1)
- **Servers:** [fossrit.community](#)
- **Purpose:** Discussion forums for FOSS@RIT community.

9.2 Hosts

The current deployment is made up of a single DigitalOcean droplet, [fossrit.community](#). This host runs:

- Docker
- [Discourse Docker image](#)

This host relies on:

- SendGrid API key (for outgoing mail only)

9.3 Deploying

Our Discourse site was deployed exactly as described in upstream's documentation:

- [Install guide](#)
- [Email setup guide](#)

9.4 Configuration

We do not use config files to maintain Discourse. The config settings are dynamic and stored inside the image container. If a rollback is needed, see [Backups](#).

9.4.1 Firewall

Note that DigitalOcean maintains its own firewall, a layer above the Linux Droplet where the Discourse forum is hosted. If adding or changing ports on a DigitalOcean Droplet, make sure the ports you need opened are added to the Droplet firewall in the DigitalOcean admin panel. See the [DigitalOcean](#) page for more information about accessing the admin panel. See [FOSSRIT/infrastructure#44](#) for additional historical context.

9.5 Upgrading

Excerpt from meta.discourse.org.

If you self-host Discourse, you occasionally need to run a manual update via the command line to get the latest security releases newest libraries. These updates are not picked up in admin/upgrade, which is why you'll occasionally need to do this additional step.

- Discourse itself should be updated about twice a month, by clicking the “Update to Latest Version” button in your admin dashboard (admin/upgrade). We do beta releases roughly once every week.
- Every two months we recommend SSH'ing into your web server and doing

```
cd /var/discourse
git pull
./launcher rebuild app
```

- As for Ubuntu updates, make sure you have automatic security updates enabled for your Ubuntu! The command is:

```
dpkg-reconfigure -plow unattended-upgrades
```

However, that just covers critical security updates. Every so often you should get all the OS updates like so:

```
apt-get update
apt-get dist-upgrade
```

To summarize:

- update Discourse twice a month via web updater
- update the container every two months
- update the OS every six months

You could double these numbers and still be fairly safe, e.g. update Discourse once a month, container every 4 months, OS once every 12 months, and so on.

But you really, really want automatic security updates enabled in Ubuntu, as listed above – all our Digital Ocean “one-time installs” already have automatic security updates set up.

9.6 Backups

Two types of backups are made of the Discourse site:

9.6.1 Site-level backups

The Discourse site takes a weekly backup of site content, usually between 00:00–01:00 on Thursdays. These backups are available from the admin panel:

fossrit.community/admin/backups

These backups can be used for rollbacks, triggered by admin users.

9.6.2 Droplet-level snapshots

Snapshots are currently enabled via DigitalOcean (\$2/month). They are scheduled to start weekly Friday 3 PM to Saturday 2 PM (EST). Snapshots can be accessed via the DigitalOcean droplet settings.

GITHUB

This page documents the [FOSSRIT GitHub organization](#). It explains how the GitHub organization is managed.

10.1 Owners

Owners retain full administrative access to the entire FOSSRIT GitHub organization. This includes read, triage, write, maintain, and admin permissions on *all* repositories. Currently the following people are owners of FOSSRIT:

- [Joe](#)
- [Justin W. Flory](#)
- [Mel Chua](#)
- [Mike Nolan](#)
- [Stephen Jacobs](#)

This list can be viewed in the GitHub organization [here](#).

10.2 Repositories

There is not much central management for repositories in the FOSSRIT organization. Members of FOSSRIT are allowed to create their own repositories in the organization. The only suggestion worth making is to add repository topic tags to new repositories. These are added near the top of a specific repo. Some common tags used are below:

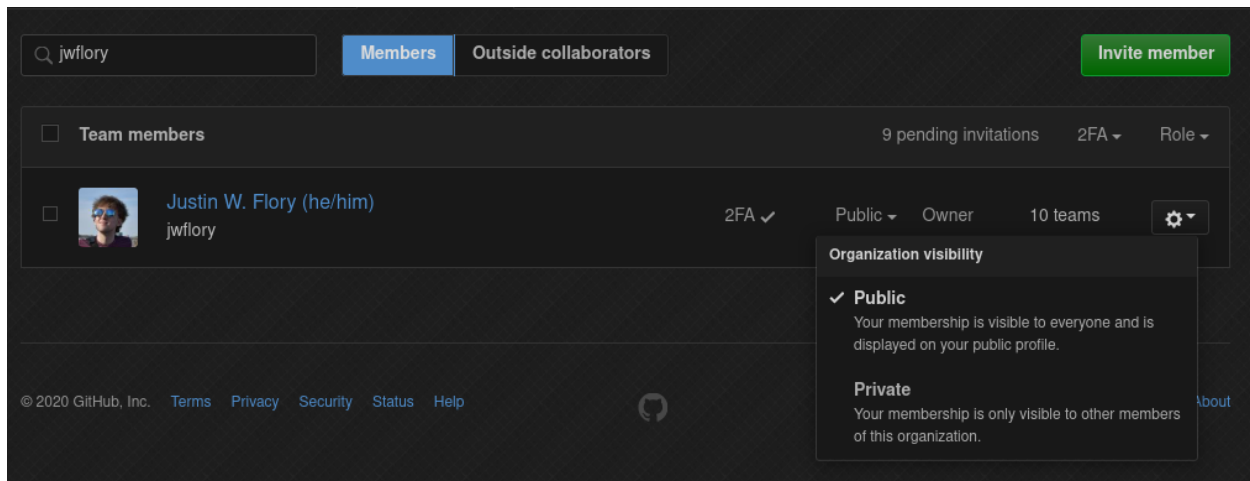
- `rit`
- `rochester`
- `rochester-institute-of-technology`
- `university`

These make our repositories more discoverable on GitHub and also builds a portfolio of open source projects from RIT across all of GitHub.

10.3 People

When adding new people to the FOSSRIT GitHub organization, invite them to a specific team, not the general GitHub organization. See [Teams](#) below for more details about team management.

The only other detail worth noting is that GitHub sets organization membership to private by default. Setting membership to public means the FOSSRIT organization appears on your GitHub user profile. Generally it is a good idea to remind new members about this and encourage them to set their membership to public. This is done by going to the [People](#) tab, searching for your profile, and changing the *Private* dropdown to *Public*:



10.4 Teams

Teams are the cornerstone of access control and permission management in FOSSRIT. They are complex, but not without good reason. This was designed to make access organized and transparent over time. [GitHub Owners](#) can modify membership of any teams.

Currently, there are four top-level teams in FOSSRIT. Unless there is a *really* good reason, new teams should be created as sub-teams of these four top-level teams. The four top-level teams are as follows:

- FOSS@MAGIC
- Friends of FOSS
- Projects
- Students and alums

Each top-level team is explained in detail below.

10.4.1 FOSS@MAGIC

NOTE: This top-level team is the most nuanced and grants access to several things. Please read this documentation carefully before making changes to this top-level team or any sub-teams.

The FOSS@MAGIC team is for payroll faculty, professors, other MAGIC staff, FOSS academia instructors, and community volunteers. Team and sub-team membership should be regularly maintained for auditing purposes.

Membership

The top-level team is *only* for people who are currently employed on the RIT MAGIC Center's payroll. FOSS@MAGIC volunteers are not included on this team; they are included on one of the *sub-teams*.

Repositories

The top-level team grants different levels of access to the following repositories:

- [FOSSRIT/fossrit.github.io](#): Maintain
- [FOSSRIT/runbook](#): Maintain
- [FOSSRIT/tasks](#): Maintain

Note these permissions have a “trickle-down” effect on all sub-teams. Each sub-team inherits these permissions from the FOSS@MAGIC top-level team.

Projects

The top-level team grants **write access** to the [FOSS@MAGIC operations](#) project board. Each sub-team also inherits this access. For more details on project board management, *see below*.

FOSS@MAGIC sub-teams

Currently there are two sub-teams of FOSS@MAGIC:

- FOSS academia
- Tech Team

Each sub-team is explained in detail below.

FOSS academia

This sub-team is for people involved with the [Free and Open Source Software and Free Culture Minor](#) and curriculum. Currently, this mostly means teaching faculty. In addition to inheriting the top-level team permissions, it also grants admin access to a single private repository for the FOSS academia curriculum.

Tech Team

This sub-team is for people involved with the *FOSS@RIT Tech Team*. It grants a range of access to software and infrastructure projects in FOSSRIT (in addition to what is inherited from the FOSS@MAGIC top-level team):

- FOSSRIT/infrastructure: Triage
- FOSSRIT/shalom-street-Toy: Maintain

There is also a sub-team of the Tech Team: *Ansible maintainers*. This sub-team grants **maintain** access to FOSSRIT/infrastructure. Ansible maintainers are a specific subset of the Tech Team who want to help with Ansible and config management. Membership in this group means you are automatically assigned to review new pull requests in the FOSSRIT/infrastructure repository.

10.4.2 Friends of FOSS

This team is a collection of people who are associated with the FOSS@RIT community, but do not fit in another top-level team. This is like a “catch-all” team for anyone who wishes to show their affiliation with our community on their GitHub profile. This top-level team does not grant access to any repositories.

There is only one sub-team: *Founding members*. This sub-team is a historical archive of people who were involved in the earliest days of the FOSS program at RIT between 2009-2012.

10.4.3 Projects

This top-level team is for groups of collaborators on specific projects in the FOSS@RIT community.

Repositories

The top-level team does not grant access to any repositories. Instead, commit/admin access should be granted to specific sub-teams for a specific project or collection of projects.

Sub-team membership

Each sub-team created underneath this team should be for a specific project or collection of GitHub repositories. For example, the *FOSS Letters* sub-team includes three people. These three people have full admin rights to two repositories associated with the FOSS Letters project.

Additionally, some of FOSS Letters team members are designated as **maintainers**. This gives them permission to invite others in the FOSSRIT GitHub organization to their project and give them commit/admin access.

10.4.4 Students and alums

As it implies, this group includes students and alums of RIT who are associated with the FOSS@RIT community.

Repositories

This group grants read access to a single private repo with planning materials for the [Free and Open Source Software](#) and [Free Culture Minor](#).

Sub-team membership

Do not add people to this group. Add them to one of the appropriate sub-teams. There are three sub-teams, with an indefinite number of sub-teams beneath them:

- Alums
- Current students
- FOSS curriculum students

Alums

This group includes sub-teams for graduating classes of RIT, sorted by graduating year. If an alum's graduating year is unknown, add them to this team. Otherwise, add them to a team with a specific graduating year.

Current students

Every current student should be added to a sub-team for a specific graduating year. This helps us understand who is an active student in our community over time.

FOSS curriculum students

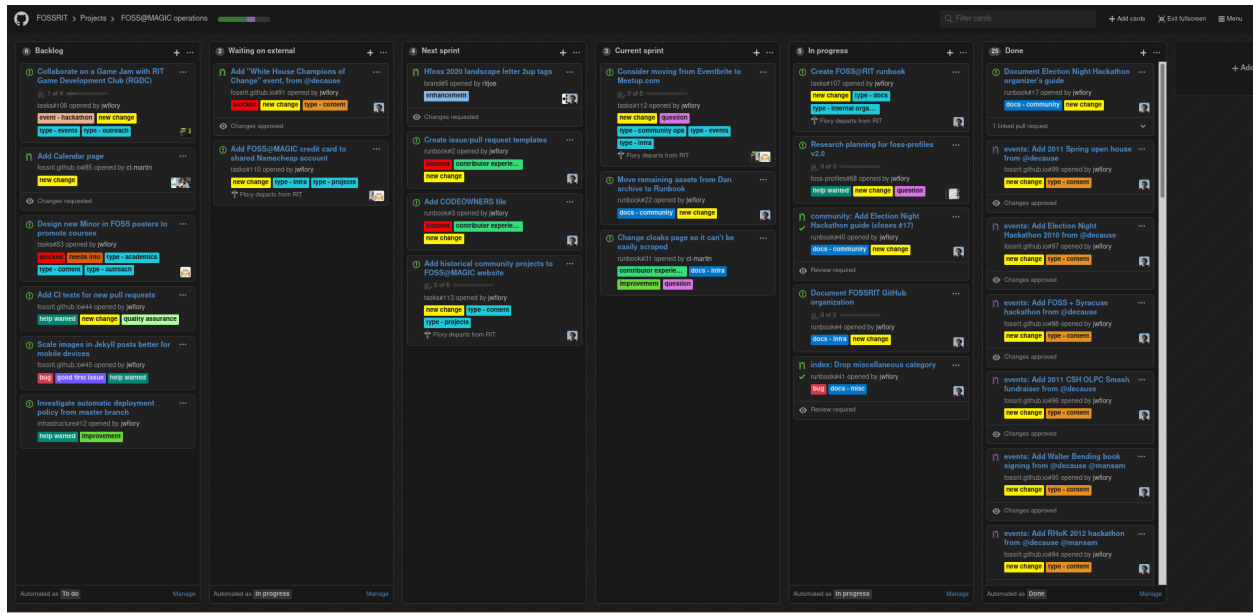
This team includes students and alums who participated in any of the FOSS courses taught at RIT. There are two sub-teams, one for each course taught:

- IGME-582
- IGME-585

Beneath this, there are sub-teams for each semester. Students of a particular class and semester should be added to a team for a specific semester.

10.5 Organization projects

This section applies to organization project boards, not project boards on specific repos. While this may change, currently there is only one organization project board: [FOSS@MAGIC operations](#). This project board is used by FOSS@MAGIC staff for weekly task planning and time management:



Note the duration of a sprint is flexible. In early 2020, sprints typically lasted for two week intervals. But use best judgment for how long a “sprint” should be, based on current number of staff and volunteers working on issues.

10.5.1 Agile structure

Six columns exist on the project board:

- Backlog
- Waiting on external
- Next sprint
- Current sprint
- In progress
- Done

Backlog

Backlog is used to track things FOSS@MAGIC staff or community volunteers need to do, but there is not enough time right now to do them. Eventually, issues from the backlog are selected for inclusion in upcoming sprints. The backlog can become long over time, so it is important to prioritize the most important issues when planning future sprints.

Waiting on external

Waiting on external means an issue is blocked on something outside of the control of FOSS@MAGIC staff or volunteers. Typically, this is when an outside collaborator or external stakeholder is needed to move a discussion or planning forward. Since it is unclear when an issue will become “unblocked”, this column is used to track things we might need to follow up on, but cannot push forward on our own.

Next sprint

The next sprint column is used to triage specific issues to be worked on in the next sprint. Using this column is helpful to think ahead and prioritize what issues to work on from the backlog. It leaves room for retrospection on what the most important future work is.

Current sprint

The current sprint column is used for issues that will be worked on in the current sprint, but work has not yet started. By the end of a sprint, everything in this column should either be moved to *In progress* or *Done*. A good health metric to judge your project management skills on is how often this column is actually cleared. If you put a lot of issues into the current sprint, but most of them are unfinished or incomplete by the end of the sprint, this is a sign you are being too ambitious in your planning.

Try to keep this column as realistic as possible for what can be completed in one sprint.

In progress

Any issues or pull requests that are actively in progress or open belong here. New pull requests generally appear here automatically, but issues need to be moved over. If there are several people working on FOSS@MAGIC tasks, this column is helpful to indicate to your team that work has started on an issue. This avoids stepping on people’s toes later if someone decides to take on a new issue from the *Current sprint* column!

Done

When an issue is closed or a pull request is merged, it is automatically moved to this column. At the end of a sprint, all cards under this column should be archived and the column should be emptied. Nothing stays on the project board forever!

Note on column automation

Each column is configured with automation rules that move the issues across columns. New issues generally appear in *Backlog*. Closed issues and merged pull requests will go to *Done*. Generally, everything between those two columns is managed manually. Do your best to keep this up-to-date to get the most out of the project board!

10.5.2 Linked repositories

Generally, only these repositories add issues to this project board:

- brand
- foss-profiles
- fossrit.github.io
- infrastructure
- tasks

The issues in this set of repositories typically involve FOSS@MAGIC staff (including student employees). Therefore, they are linked to the project board.

10.6 Settings

This section documents the [Settings](#) page of the GitHub organization. To reduce documentation overhead, the only documented parts from settings are things that are expected to change or important logistic information. Generally, the GitHub organization settings are changed rarely and infrequently.

10.6.1 Billing

No billing information is added to the FOSSRIT GitHub organization. However, in 2018, we were eligible for GitHub for Education's lifetime coupon for unlimited private repositories. Currently, we receive a "100% off forever" coupon from GitHub:

Billing

<p>Current monthly bill</p> <p>\$0</p> <p>Switch to yearly billing</p>	<p>Next payment due</p> <p>—</p> <p>View payment history</p>	<p>Frequent actions</p> <p>Update payment method</p> <p>Redeem coupon</p> <p>Explore subscription options</p>
---	--	---

Subscriptions	Cost management	Payment information
---------------	-----------------	----------------------------

PAYMENT METHOD	LAST PAYMENT	COUPON	EXTRA INFORMATION
<p>You have not added a payment method.</p> <p>Add payment method</p>	<p>You have not made any payments.</p>	<p>100% off forever</p>	<p>No additional information added to your receipts. ?</p> <p>Add information</p>























This organization is signed up for seat based licensing and has no private repository limits. Please [contact support](#) if you have any questions about your account.

10.6.2 Verified domains

Currently the only verified domain for the FOSSRIT GitHub organization is `fossrit.community`. DNS settings are managed in our Namecheap account (see [Namecheap](#)).

10.6.3 Third-party access

Keep third-party access limited as it applies to our private repositories. Currently the only private data is development resources around the FOSS Minor, but this could always change. Granting third-party access to applications grants access to our private repos, so try to keep access under control:

 github2fedmsg ...	✓ Approved — 
 Slack ...	✓ Approved — 
 Docker Hub Registry ...	✓ Approved — 
 CircleCI ...	✓ Approved — 
 Code Climate ...	✓ Approved — 
 Read the Docs Community (readthedocs.org) ...	✓ Approved — 
 Travis CI for Open Source	✓ Approved — 
 Trello GitHub Integration ...	✓ Approved — 
 Scalar	✓ Approved — 
 SourcetreeForMac ...	✗ Denied — 
 The GitHub Desktop Development App ...	✗ Denied — 

10.6.4 Repository labels

In 2020, [@jwflory](#) defined a custom set of repository labels based on his experience managing FOSSRIT GitHub repositories and also other open source communities. These labels are included on any new GitHub repository created under FOSSRIT. Generally, every label here was created because a need was identified. It is always possible to add new labels, but generally avoid removing labels without a clear reason or motivation. If in doubt, open an issue on [FOSSRIT/tasks](#)!

14 labels			
blocked	Progress blocked by another task or issue	Edit	Delete
bug	Something isn't working	Edit	Delete
contributor experience	Quality-of-life improvements or changes to project contribution processes or resources	Edit	Delete
documentation	Improvements or additions to documentation	Edit	Delete
duplicate	This issue or pull request already exists	Edit	Delete
good first issue	Good for newcomers	Edit	Delete
help wanted	Extra attention is needed	Edit	Delete
improvement	Improves on something that already exists	Edit	Delete
invalid	This doesn't seem right	Edit	Delete
needs triage	Metadata needs to be triaged and updated	Edit	Delete
new change	Adds new capabilities or functionality	Edit	Delete
quality assurance	CI tests, unit tests, integration tests, any kind of testing	Edit	Delete
question	Further information is requested	Edit	Delete
wontfix	This will not be worked on	Edit	Delete

10.6.5 Teams

Team discussions are intentionally disabled. They are disabled because they are not easily visible to the wider FOSS community, and we have *many* teams and sub-teams. Instead, it is encouraged to use the [Discourse forum](#) for community discussions.

Team discussions

Team discussions provide a place for a team to have conversations that span across projects or repositories and that don't belong in an issue or a pull request.

☐ **Enable team discussions for this organization**
This allows members to start discussions in any team in the **FOSSRIT** organization.

Save

IRC (FREENODE)

This page documents the [Internet Relay Chat \(IRC\)](#) infrastructure for the FOSS@RIT community. Currently, this only includes our presence on the [Freenode](#) IRC network.

11.1 Project registration

TODO...

11.2 Cloaks

Cloaks are a type of “host mask” that replaces your IP address in IRC clients with a custom string of text. The IRC protocol exposes your IP address or hostname by default when you join a channel. When you authenticate with IRC’s NickServ, a cloak replaces your IP address/hostname with the custom string.

Note that Freenode does not support the underscores (_) in cloaks. Other non-alphanumeric characters may also not be supported and will be omitted from the cloak.

11.2.1 Request a cloak

In order to receive a cloak, you must have completed the following steps:

1. Register your nick with NickServ
2. Set an email address with NickServ
3. Created an alternate nick and linked it to primary nick with NickServ

If you have not completed these steps, Freenode will not allow us to create your cloak. For help doing these things, check out the [Nickname Registration help page](#) on Freenode’s website.

Once you have completed the above steps, you can request a new cloak. Request a cloak by [opening a new issue](#) on the [FOSSRIT/tasks](#) repository.

11.2.2 Available cloaks

Members of the RIT community may choose from the following cloaks:

General

- @rit/student/<your IRC nick>
- @rit/professor/<your IRC nick>
- @rit/faculty/<your IRC nick>
- @rit/alumnus/<your IRC nick>
- @rit/alumna/<your IRC nick>
- @rit/alum/<your IRC nick>

RIT FOSS

Cloaks for the [RIT FOSS community](#).

- @rit/foss/student/<your IRC nick>
- @rit/foss/faculty/<your IRC nick>
- @rit/foss/alumnus/<your IRC nick>
- @rit/foss/alumna/<your IRC nick>
- @rit/foss/alum/<your IRC nick>

RITlug

Cloaks for the [RIT Linux Users Group](#).

- @rit/ritlug/member/<your IRC nick>
- @rit/ritlug/alumnus/<your IRC nick>
- @rit/ritlug/alumna/<your IRC nick>
- @rit/ritlug/alum/<your IRC nick>

11.2.3 Granted cloaks

The table below is a list of community members who were issued IRC cloaks.

MATRIX

This page documents the use of the [Matrix.org network](#) and [Riot chat client](#) in the FOSS@RIT community. Matrix is a decentralized chat network while Riot is one (of many) possible clients for participating in the chat network.

12.1 How we use Matrix

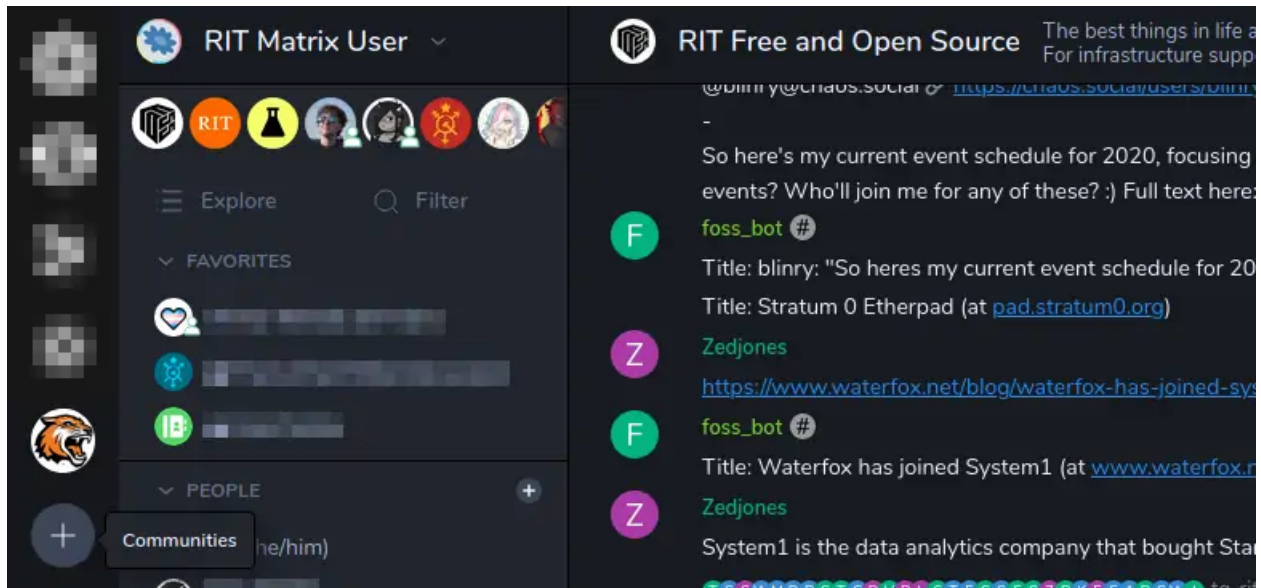
Matrix is convenient for us because it offers compatibility with existing IRC networks, such as Freenode. Since the FOSS@RIT community was established on Freenode in 2010, we have a historical presence on IRC (see [IRC \(Freenode\)](#)). Matrix/Riot provides a modern user interface in a chat client and integrates nicely into existing IRC channels. Many FOSS@RIT community members use the Matrix network, but can communicate seamlessly with IRC channels.

For help using Matrix/Riot, refer to the following links:

- [IRC for the 21st Century: Introducing Riot](#)
- [How do I register/identify to NickServ?](#)

12.2 RIT community

In 2017, [Riot.im announced communities](#), a feature that groups rooms and users together (similar to a Slack team or a Discord server). (Note eventually this will be replaced by [Groups-as-Rooms](#).) There is a RIT community on the [matrix.org](#) homeserver: `+rit:matrix.org` ([view on Riot](#)).



The RIT community is owned by @jflory7:matrix.org. At the time of writing, it is not possible to add other admins to communities.

12.3 Known rooms

The following is a list of all known Matrix rooms related to RIT or the FOSS@RIT community.

NAMECHEAP

This page documents the use of a shared Namecheap account for FOSS@MAGIC. This account is used to purchase and renew web domains associated with our community.









13.1 Access

Unlike other services, a single, shared account is used for FOSS@MAGIC. A single password is shared among FOSS@MAGIC payroll staff and some Tech Team volunteers to manage the account. The account is registered to the `foss [at] rit [dot] edu` address. Currently, this grants login access to the following people:

- Brenda Schlageter
- Justin W. Flory
- Stephen Jacobs

13.2 Registered domains

This section documents what domains are registered to the account and any active Domain Managers associated to a domain. **Domain Managers** are other Namecheap accounts with some rights to manage and configure domains. This is one way to share access to a domain *without* sharing the password to the primary account.

All	Products	Expiration
 teleirc.com  PROJECTS		 May 7, 2020 Domain
 fossrit.community  RIT		 Jan 8, 2025 Domain

13.2.1 fossrit.community

- Expiration: **2025 Jan. 8**

The `fossrit.community` domain is associated with the [Discourse forums](#) and this Runbook. Currently there is one Domain Manager:

1 Domain Manager

`jflory7`

Manage WhoisGuard, Change DNS Type, Manage Email Forwarding, Manage PremiumDns, Manage DnsSec, Manage Domain Lock, Customize Parking Page, Manage Host Records, Manage Dynamic DNS, Renew Domain, Manage Private Nameservers, Manage Auto-Renewal

13.2.2 teleirc.com

- Expiration: **2022 May 7**

The `teleirc.com` domain is associated with the [TeleIRC project](#) managed by the [RIT Linux Users Group](#). This domain is managed by FOSS@MAGIC as a service to RITlug, since TeleIRC is an important part of the FOSS@RIT community infrastructure (see [Chat bridges](#)). Currently there are two Domain Managers:

2 Domain Managers

`jflory7`

Manage WhoisGuard, Change DNS Type, Manage Email Forwarding, Manage PremiumDns, Manage DnsSec, Manage Domain Lock, Customize Parking Page, Manage Host Records, Manage Dynamic DNS, Renew Domain, Manage Private Nameservers, Manage Auto-Renewal

`tjzabel`

Change DNS Type, Manage Email Forwarding, Manage PremiumDns, Manage DnsSec, Manage Host Records, Manage Dynamic DNS, Manage Private Nameservers

13.3 Billing

FOSS@MAGIC covers the expenses for the domain renewals on as needed. Namecheap is set up with automatic renewal to the RIT MAGIC Center via an RIT-managed credit card.

TELEGRAM

This page documents the Telegram chat groups in the wider FOSS@RIT community.

14.1 Roles

There are different types of roles recommended for FOSS@RIT Telegram groups. The *Creator/Owner* role is defined by Telegram. The *Admin* and *Moderator* roles are custom roles commonly used in the FOSS@RIT community.

14.1.1 Creator/Owner

The original creator of a group retains full permissions as Owner. This includes full discretion to change group settings (including the public URL), add new admins, moderate chat, and more. This role is created by Telegram itself and will always exist. The group owner role persists even if the owner leaves and returns to the group later.

Group ownership is transferrable. If a group creator is no longer involved in the FOSS@RIT community, it is a good idea to transfer ownership to someone actively involved with FOSS@MAGIC.

At time of writing, the following group settings are only changeable by the Owner:







1. Public username / group URL
2. Visibility of chat history for new members (*visible* or *hidden*)

14.1.2 Admins

Admins are users with full permissions to change all settings of a group. Admins are appointed by the Owner or other Admins. They should have all permissions to fully manage the group:

1. Change group info
2. Delete messages
3. Ban users
4. Invite users via link
5. Pin messages
6. Add new admins
7. No custom title

What can this admin do?

-  Change group info
-  Delete messages
-  Ban users
-  Invite users via link
-  Pin messages
-  Add new admins

This admin will be able to add new admins with the same (or more limited) permissions.

Transfer group ownership

Custom title


admin

14.1.3 Moderators


Moderators are users with permissions to moderate the group chat, but not modify group information and settings. Moderators are appointed by the Owner or other Admins. They should have the following permissions:


1. Delete messages
2. Ban users
3. Invite users via link
4. Custom title: **Moderator**


What can this admin do?


 Change group info

 Delete messages

 Ban users

 Invite users via link

 Pin messages

 Add new admins

This admin will not be able to add new admins.

Custom title

Moderator

A custom title that will be shown to all members instead of 'admin'.

14.2 List of known groups

The following is a list of known Telegram groups associated with FOSS@RIT:

WEBSITE (FOSSRIT.GITHUB.IO)

This page documents the official FOSS@MAGIC website hosted on GitHub Pages. The website source code is found in FOSSRIT/fossrit.github.io.

15.1 About

- The site is built using [Jekyll](#), [Bootstrap](#) (via CDN), [Font Awesome](#) (via CDN), & [GitHub Pages](#)
- [PDF.js](#) is used for embedding PDFs in pages (via CDN)
- “Pretty links” is turned on in the Jekyll configuration (see `permalink: pretty`)
- `github-pages` Gem used to simplify dependencies
- The live site is updated by committing changes to the `master` branch

The site uses an undocumented feature of Jekyll where categories are defined using `category/_posts/` instead of `_posts/category/`.

15.1.1 Git work flow

This describes how to make any type of contribution to the FOSS@MAGIC website:

1. Fork repository to your GitHub account (go to FOSSRIT/fossrit.github.io and click “fork”)
2. Clone repository locally to your workstation
3. Create/add files
4. Git commit
5. Git push to your fork
6. Open pull request against `master` branch of FOSSRIT/fossrit.github.io repository
7. When pull request is merged, site updates in a couple of minutes

15.1.2 Jekyll and Front Matter

Jekyll is what builds the site. It renders Markdown and handles templating. *Jekyll requires that all post pages start with a valid date in the syntax YYYY-MM-DD-<title>.md.*

Jekyll uses something called [Front Matter](#) to know more information about the page. Front Matter defines what the page looks like and metadata such as the title, author, and event details (where applicable).

Frontmatter should be at the top of a post and should be surrounded by triple-dashes (---). *All times are of the timezone America_New_York.*

Additionally, Jekyll uses the string `<!--more-->` to define where the summary of pages end. This is used when showing post previews on the site. Optionally, the `excerpt` Front Matter can be defined instead to override this (if using an HTML page instead of Markdown in special cases, the `excerpt` Front Matter *should be used* instead of `<!--more-->`). Please use this functionality to keep lists of posts readable.

Calendar feed

Jekyll also generates an iCal calendar feed of event announcements, talks, and events. This feed is generated at fossrit.github.io/feeds/calendar.ics.

Here is the logic for common, notable event properties:

- Titles come from the `title` Front Matter
- Descriptions come from the page body. Uses summaries if defined with `<!--more-->` (or `excerpt` Front Matter).
- Dates:
 - If specified, `date-start` and `date-end` allows manual specification of event date and time
 - * Useful when announcement of an event is not same day as event itself
 - * Also allows specifying start/end times
 - Otherwise, the date given in the file name is used
- Locations can be (optionally) specified with the `location` Front Matter
- URLs:
 - If `redirect`, gives link directly
 - If for post, gives post link
 - Otherwise, gives the [Get Involved](#) page by default

Example post

```
---
title: Example thing
layout: post
---
Hello FOSS folks!

This week...

<!--more-->
```

(continues on next page)

(continued from previous page)

```
Other things happening.
```

```
- Signature
```

15.2 Create a development environment

This website uses [containers](#) for a development environment. A container runtime like Docker or Podman works on Linux, macOS, and Windows. Containers closely mimic how the production version of the site is deployed. This means when you test your changes locally with containers, they will deploy in production successfully. This is also how maintainers test new pull requests.

15.2.1 Pre-requisites

Install one of the following container runtimes:

Docker

- Linux
 - [Fedora](#)
 - [Ubuntu](#)
- macOS

Podman

- [Podman installation instructions](#)

15.2.2 Build and serve Jekyll locally

To build the site and serve it as a website from your workstation, run the following script:

```
./build.sh
```

This script downloads the Jekyll container from Docker Hub, builds the website, and serves it on port 4000. Make sure other services are not running on port 4000 when running the script. Once the site finishes building, access the local version of the website at this URL:

```
http://localhost:4000
```

PRO-TIP: Running the script takes a while to install dependencies. However, the container continues to rebuild the website so long as the script is still running. To take advantage of this, run the `build.sh` script when you first start developing, and leave it running until you are done.

15.3 How to update FOSS Hours time/place

Edit `_config.yml` and update the settings `meeting-day`, `meeting-place`, and `meeting-time`. These settings are used across the website automatically. The meeting time and place are referenced in the `_config.yml` so they are updated in one place.

Example:

```
# --- meeting schedule settings ---  
  
# They appear exactly as typed. Follow the format already here when updating.  
meeting-day: Thursday  
meeting-place: MSS/71-3190 (conference room)  
meeting-time: 5:00PM - 7:00PM
```

15.4 How to add content

This section describes how to add new content to the FOSS@MAGIC website.

Add a new `.md` file to one of the `_posts/` folders for a category. Store assets (a.k.a. pictures, PDFs, or other downloadable files) in a folder within that category (e.g. `projects/assets/`). Include the date in asset file names so it is clear what references it.

Content categories include the following:

- Announcements
- Events
- Projects

15.4.1 How to create announcements

Announcements spread the word about what is happening in the community. Posts in this category are added to an RSS Feed (at fossrit.github.io/feeds/latest.xml).

- Create a new Markdown file in `announcements/_posts/` named with the convention `YYYY-MM-DD-<title>.md`

Example announcement

See `2019-12-17-spring-2020-volunteers.md`:

```
---  
author: Justin W. Flory  
title: "Call for Volunteers: Spring 2020"  
layout: post  
---  
  
Hi FOSS folks!  
We are looking for volunteers from the RIT community!  
If you are interested in volunteering with FOSS@MAGIC in the Spring 2020 semester...
```

15.4.2 How to create event profiles

Events are written before or after an event.

Events often use an image gallery functionality. Typically, photos are added to the gallery after an event. Use the `images` Front Matter with an array of photos. The `images` parameter takes relative links to the RITlug site or absolute links for images hosted on other sites. See the example event below for how to do this.

- Create a Markdown file in `events/_posts/` named with the convention `YYYY-MM-DD-<title>.md`

Example event profile

See `2019-11-05-election-night-hackathon.md`:

```
---
layout: event
title: Election Night Hackathon 2019
authors:
- Justin W. Flory
- D. Joe Anderson
excerpt: Help transcribe suffragist papers or hack on other project during Election_
↪Night.
images:
- /events/assets/2019/11/election1.jpg
- /events/assets/2019/11/election2.jpg
- /events/assets/2019/11/election3.jpg
- /events/assets/2019/11/election4.jpg
---
Students and faculty collaborated and worked on projects during the 2019 US midterm_
↪elections.

{% include content-blocks/gallery.html %}

> FOSS@MAGIC proudly presents... the 9th Annual Election Night Hackathon!
```

15.4.3 How to add projects

Projects are about things the FOSS@RIT community work on. They are not added to an RSS Feed.

- Create a Markdown file in `projects/_posts/` named with the convention `YYYY-MM-DD-<title>.md`
 - The date is required because of a Jekyll requirement to list projects
 - Should be updated at least once a year if project is on-going

Like events, projects often use the image gallery.

Some projects use custom HTML (in-line or entirely) to have a better show effect. If using custom HTML, remember to set the `excerpt` Front Matter. If doing the page entirely in custom HTML, the `layout` should be set to `default`, which includes the FOSSRIT navbar & footer, but not the page background.

The `author/authors` Front Matter should be defined. Additionally, the `permalink` property is commonly used to give a more special URL.

Example project

See 2020-03-01-teleirc.md:

```
---
layout: project
title: TeleIRC
permalink: /projects/teleirc
authors:
  - Justin W. Flory
  - Kennedy Kong
  - Kevin Assogba
  - Mark Repka
  - Nate Levesque
  - Nicholas Jones
  - Seth Hendrick
  - Tim Zabel
excerpt: >
  TeleIRC bridges communication between Telegram groups and IRC channels.
  This bot was originally written for the RIT Linux Users Group Telegram group and
  ↪ IRC channel.
  Today, it is used by communities all over the world.
images:
  - https://ritlug.com/projects/assets/teleirc/logo.svg
---

RITlug TeleIRC is a NodeJS implementation of a Telegram <=> IRC bridge.

{% include content-blocks/gallery.html %}
```

15.4.4 How to add calendar events

The website has an [interactive calendar](#) built in.

Sometimes you want to add an event to the calendar but the details are not yet decided. For example, weekly FOSS Hours meetings have a set time and date but typically does not have pictures or a lot of details, since it is an informal gathering. **Calendar events** are less formal and do not require as much detail, but they show up on the *Calendar* page.

This is different from event profiles. Event profiles are typically showcases of significant events involving the FOSS@RIT community.

How to add calendar events

Create a Markdown file in the `meetings-meetups/_posts/` folder with the file name convention `YYYY-MM-DD-your-title.md` (such as `2020-04-25-imaginerit.md`). Additionally, calendar placeholders are highly encouraged to use the `redirect` layout and Front Matter to specify a link for the event.

For example:

```
---
layout: redirect
redirect: https://www.rit.edu/imagine/
date-start: "2020-04-25 10:00"
date-end: "2020-04-25 17:00"
location: "MAGIC Spell Studios"
title: "Imagine RIT"
```

(continues on next page)

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Come visit the FOSS@MAGIC booth at the annual Imagine RIT festival!
Stay tuned for more info closer to the event.

How to add recurring calendar events

Calendar events can also take a `rrule` Front Matter for recurring events, written to the [iCal spec](#).

Of particular note:

The UNTIL rule part defines a DATE or DATE-TIME value that bounds the recurrence rule in an inclusive manner. If the value specified by UNTIL is synchronized with the specified recurrence, this DATE or DATE-TIME becomes the last instance of the recurrence. The value of the UNTIL rule part *MUST* have the same value type as the DTSTART property.

For example:

```
layout: redirect
redirect: https://fossrit.github.io/about/
date-start: "2020-01-16 17:00"
date-end: "2020-01-16 19:00"
location: "MAGIC Spell Studios MSS-3190"
title: "FOSS Hours"
rrule: "FREQ=WEEKLY;UNTIL=20200423T190000"
```

Come meet other students and faculty involved with FOSS efforts at RIT!

INDICES AND TABLES

- `genindex`
- `modindex`
- `search`