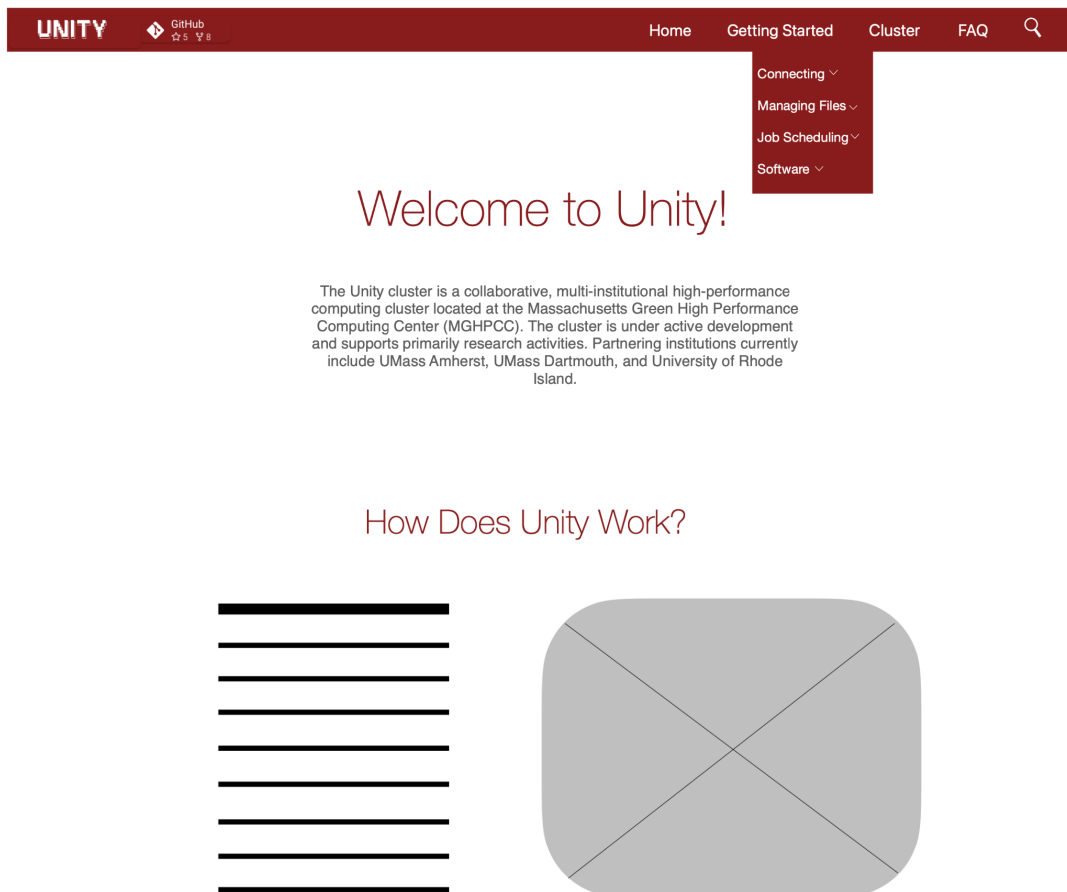*This writing sample includes my process for editing a documentation website for The Center for Data Science. It includes tips and suggestions to improve grammar and clarity. It also includes a wireframe idea for the new website.*

Summarized key notes (original: https://docs.unity.rc.umass.edu/index.html)

- In the **Home Page: Connecting to the cluster** is a little confusing – see below notes
- **Headings** should generally be more specific, action-oriented, and descriptive
- **Introductory sentences** are very useful for orienting the reader to the page so that they know if they are in the right place, or if/when the information is useful to them
- More descriptive and specific **links**
- Breaking up large paragraphs of text into **bullet points or numbers**, especially when it contains important information or procedural steps
- Using **present tense for feedback statements**, so instead of "This will generate a private/public key pair which is unique to each user," it could be "This generates a private/public key pair that is unique to each user." This just make the steps more consistent and readable

Web Design / Nav / Organizational Notes

- Wireframe (Unity home page):

Create an Account

Students

Students must be granted access by a PI.

1. Create an account on the Unity main page.

2. Click "Login/Request Account".

3. Click on your institution or search for it via the search bar.

4. Once your account is created you need to assign a PI to it. To do this, go to "My PIs" using the left side menu and click the large "+" button.

5. Follow the prompts to generate your unique SSH key. You can search for your PI by name.

6. Once found, click on "Send Request". After your PI approves your request, you have access to Unity and your PI's project code and data stored in Unity.
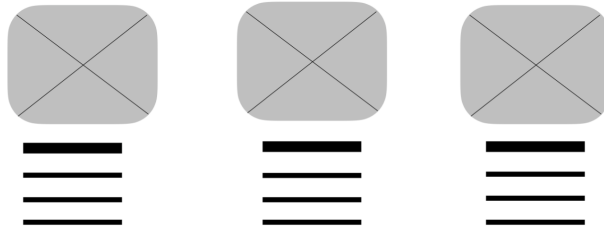
Faculty & PI's

If you are a Faculty member or Principal Investigator (PI), please create an account on the Unity main page.

1. Create an account on the Unity main page. Use your campus NetID and password.

2. Go to Account Settings and request PI status by clicking the "Request PI account" button.

3. Once your account is approved, you are able to approve adding additional users to your PI group in the "My Users" button on the side menu.

Adding users will grant them access to your PI/work directory.

You cannot create accounts for your users. Users in your group need to request access to join your PI group.

Connecting to the Cluster

Requesting Resources

Home page

Introduction to Unity

- Consider replacing "Introduction to Unity" with the "Welcome to Unity!" that you begin the first paragraph with (and then taking it out of the paragraph)

Accessing Unity

- A better heading would be Creating an Account
- This section acknowledges the different users that might be accessing Unity: Faculty/PI's and Students
  - These sections might benefit from **their own headings**, rather than relying on bolded words to grab reader's attention – so making **Faculty/PI's** one heading, and **Students** another heading
- It would be useful to **break up the paragraphs of steps** on how to access Unity, and see how the steps would look if they were **numbered** or **listed**. This would increase readability and make it easier to follow the steps, especially for novice readers.
- Format this part to stand out – "**Note:** If you are a student, do not request a PI account. This will slow the process down. You should assign a PI to your account by clicking the "+" button. Your PI will then be able to approve your account."
  - Notes on other pages, such as the Connecting > SSH Connection page, are **formatted with a box and pencil icon**. That would work here as well.
- **"Something not working for you?"** and **"Need expert help"** could also be their own headings / sections, or there could be one big **Troubleshooting** section for this information.

Connecting to the cluster

- Visually and to orient the reader, it would be helpful to break up this section into two smaller subsections: **Connect to Unity through JupyterHub** and **Connect to Unity through an SSH connection** (also, what about **On Demand method**?)
  - I also noticed that when you click the **link to JupyterHub here**, it brings you to a page with very **little information** – the bulk of the information you need is on the Home page itself. For the **SSH connection** method, there is very little information on the Home page and **more detailed instructions** on the **linked** page. Is there a way to make this more consistent so that it matches the expectations of the readers / minimizes confusion? For example, the steps for connecting through JupyterHub could just be moved to the linked page. Then, the Home page would only have conceptual information about these two methods, and readers would click links to jump to the instructions for each method.
  - Also, what about the **OpenOnDemand option**?

Requesting Resources

- Looks good.

How the Unity Cluster Works

- It might be helpful to **introduce this earlier**? Or be its own page?
- I like the separate sections (The Basics and How Unity Works)
- The bolding within these sections are also really helpful.
- Visual and numbered steps – great!

—--

Getting Started

> Connecting

Connecting > On Demand

- I think the introduction is too short here. Instead of saying: "The easiest way to connect to Unity is at ood.unity.rc.umass.edu.", try clarifying what that link is, and why it is the easiest way to connect.
- I also didn't see any mention of this in the **Home Page** – that might be important
    - The home page only mentions two ways – **JupyterHub** and **SSH**, and even says that JupyterHub is the easiest way to connect, which is contradictory to this.
- Great note box here!

Getting a Login Shell

- This section is well done!

Connecting > SSH Connection

- The wording for the intro here could be a little different. I would explain what SSH stands for first, then what a shell is, and what a SSH connection is after all of that.

Configure SSH Keys

- Intro to SSH keys is short and sweet, and they've included a link to more information which is great.
- The **Note** part here could be a little clearer. In the introduction of the note, I would mention that it is also recommended that you change the permissions on the file and add a password (instead of throwing it in there later).
    - "This command will make the move on any operating system:"

- - - **Specify what move** – what exactly does this command do, and be more direct/action-oriented
    - ○ → Such as "To move your downloaded private key to your home directory's .ssh folder, use this command:"
  - The same goes for the rest of this **Note** box:
    - ○ → "To change the permissions on the file and ensure its security, use this command:"
    - ○ → "To add a password to this file, use this command:"

Connection Details

- Instead of "If you know what to do with this information already, you can skip the rest of this guide," **add a couple sentences** that introduce what will be discussed in this section / what you need to do with the hostname/address and username.

CLI Users

- Could **include the command used to create the file** ~/.ssh/config (even if it is unnecessary, it makes the instructions consistent and easier to follow).
- **Get rid of the colon** before "Remember to save the file in a directory of your choosing, without an extension."
- "Copy the following contents to your Notepad" → "Copy the following contents to your text editor (Windows Notepad or Mac TextEdit)"
- These instructions would be easier to follow if they were **numbered:**
  1. Create the file ~/.ssh/config if it does not already exist.
       Command for that
  2. Copy the following contents into your text editor (Windows Notepad or Mac TextEdit):
       Content here
  3. Save the file in a directory of your choice, **without an extension**.
     a. Note box here
- The **Note** box: Is all of this info supposed to be part of the note box?
- "Doing this …" Specify (doing what?)
  - ○ → "Saving the file without an extension using the text editor and file explorer can be challenging because these user-friendly methods do not work well with files that do not have an extension."
- Some wording changes to make this information more concise:
  - ○ "In Windows Notepad, you can save a file with no extension in the 'All Files' category, and windows will add the .txt extension regardless, which won't work."

- ■ → "In **Windows Notepad**, saving the file with no extension in the 'All Files' category does not work because Windows will add the .txt extension anyway."
  - ● Also – why won't this work?
- ○ "The Mac TextEdit doesn't even have the option to save as .txt, which is tremendously unhelpful. You can make your current file plain-text formatted using ⌘-⇧-T, and you can add plain-text as a 'Save as' option in the config."
  - ■ → "The **Mac TextEdit** does not have the option to save as .txt, but you can format your file with plain-text by using the keyboard shortcut ⌘-⇧-T. You can then add plain-text as a 'Save as' option in the config."
- ○ "The most reliable way to open your OpenSSH…" This should be its own section, separate from the Note about saving your file.
- ○ These instructional sections could all be separated and distinct from each other; for example:
  - ■ **Creating and Saving the OpenSSH Config File**
  - ■ **Moving the OpenSSH Config File to the Correct Location**
  - ■ **Connecting to Unity**

Window GUI Users

- ● "Download and install PuTTY by following the link above" – unclear because the link is not technically "above."
  - ○ Change to →

Windows users can use PuTTY to connect to Unity. PuTTY is a free implementation of SSH and Telnet for Windows and Unix platforms, along with an xterm terminal emulator.

1. Download and install PuTTy.
   Note: Be sure to select the 64 bit / 32 bit download depending on your system. Most are 64 bit, but if you are unsure, 32 bit will always work.
2. Open PuTTY and enter hostname unity.rc.umass.edu on the main page.
3. Etc.

JupyterHub Portal

- ● This is the page that is a little confusing to me – it makes sense to have all the information to access JupyterPortal in one spot, such as in this page.
- ● Consider eliminating it from the Home page and migrating instructions to this page.
- ● Then, the Home page can contain more conceptual information about the different ways to connect to the cluster, with links to each page.

> Managing Files

Introduction

Uploading Files to the Unity Filesystem

- The intro here is very informative and well done! It tells readers what method is best for certain situations,

Your Key File

- Information is straightforward and clear.
- Formatting could be improved slightly:

  The FileZilla and Console methods require public/private SSH keys to be set up. When you set up your Unity account, you chose between PuTTY (`.ppk`) and OpenSSH. (`.rsa`)

  - `scp` and `rsync` use OpenSSH
  - FileZilla prefers `.ppk` but can work with `.rsa`.

  Depending on which software you use, you can generate one of each. You can also convert between these keys using a program like PuttyGEN.

  - Configuring SSH Keys
  - Account Settings

OnDemand

- Add Heading to this page

You can …

- Could change heading to **Unity OnDemand allows you to …**

Opening the File Explorer

- Good

Navigating

- Good
- Heading could be more specific – **Navigating Files in the File Explorer**

- This can be changed to a list form with a short sentence preceding it:

  Use the buttons at the top of the file explorer to interact with your files, or click on the files themselves to view and edit them.

  Some key functions include:

  - Open your current working directory as an interactive session by clicking the Open in Terminal button
  - Edit a text file by clicking on the file
  - View an image by clicking on the image

Console - SCP/Rsync

- This needs an intro or short description, or else it might take a while for readers to understand what this page is about

CLI

- More specific heading that answers the question of: what are we using the command line to do? (Using the CLI to …)
- Some suggested wording changes:
  - "It's best to try this after you have already successfully connected to Unity with OpenSSH" → "After you have successfully connected to Unity using OpenSSH, you can …"
  - "Open your terminal and use `cd` to navigate to the directory (folder) where the files you want to upload are located. Alternatively, you can skip this step and use absolute paths in your command. The following example assumes that the files you want to upload are located in your desktop directory. If you are a Windows user, it also assumes that the drive you want to copy from is the C drive."
    - After the example, I would then add: "If your files are located in a different directory, replace `Desktop` with the correct directory."

SCP

- Title is too vague – what is SCP and what are we using it for → "Using SCP to copy files to your Unity home directory"
- Minor **sentence structure fix:** "This is how I can use `unity` as part of a command, because the OpenSSH config file contains the connection information for host `unity`."

→ "The OpenSSH config file contains the connection information for host `unity`, allowing you to use `unity` as part of a command."

- Move "This will copy the files in question to your Unity home directory. You could also upload elsewhere on the Unity filesystem, wherever you have permissions" to intro/before the command example and edit to → "The following command copies the files of your choice to your Unity home directory. You can also upload your files to a different location in the Unity filesystem if you have the necessary permissions."
- Combine the two Note boxes

RSYNC

- This section is unclear to me – what is RSYNC and why should we use it (instead of other options)?
- Make the title more specific / action-oriented as well → "Using RSYNC to …"

Globus

- More specific heading → Using Globus to Manage Files
- Explain what Globus collections are and why it would be useful to use it (instead of the other ways of managing files)
- Nice part about why Globus is useful. Let this sentence flow after the first one to maintain that consistent/predictable intro paragraph format.
- "How can I transfer files to and from my local machine with Globus?" – this seems to be a bit random and it is unclear that it is necessarily a link.
    - Consider making this a sentence within the intro paragraph.
    - "If necessary, you can also transfer files to and from your local machine with Globus."

Using Globus Connect in your browser

- Nice action-oriented heading
- Number the steps in bold. This makes the process easier for readers to digest and provides some visual consistency/structure.
- The (see above) note is unclear. It might make more sense to just link the page to install Globus Connect:
    - → "One is presumably Unity. The other could be your local machine if you install Globus Connect Personal."
- The images can be resized to be a bit smaller
- "Either collection involved in your transfer will do." → "You can select any collection that is involved in your transfer."
- "This will take you back to the collection search page." → "This brings you back to the collection search page."

- "Of the two split panels, each has a Collection, a Path, a number of selected files and a Start button to copy the selected files to the other side" → "Each split panel has a Collection, a Path, a number of selected files and a Start button to copy the selected files to the other side."
  - It would be more helpful to include a screenshot with both split panels, rather than just one of the panels.

FileZilla

- More specific heading – "Using FileZilla to Manage Files"
- Needs an intro/description of what FileZilla is and why it would be useful to use it (instead of the other options)
- "To use an .rsa key, type in the path to the key file by hand" → "To use an .rsa key, type in the path to the key file manually."
- Consider adding a subheading and sectioning off the first part about FileZilla and the following steps, numbering the steps, and fixing some sentence structure issues:

Getting Started with FileZilla

1. [Install FileZilla](#) if you haven't already.
   - FileZilla may ask you if you want to install McAfee, but this might not be necessary. However, if you don't have antivirus already, consider installing McAfee.
   - The FileZilla installer executable can be sometimes marked as a virus, but it is not.

Managing Files with FileZilla

1. Select the Site Manager in FileZilla.

   [Image]

2. Click New Site to create a new site.

   [Image]

3. Fill in the following fields:
   a. Type a name for the site under My Sites on the left
   b. Protocol: SFTP
   c. Host: unity.rc.umass.edu
   d. User: your email but replace the . and @ with _
   e. Key File: /path/to/your/keyfile

[Image]

This configuration is saved automatically.

4. Click the Connect button in the bottom right to open an explorer on the Unity Filesystem. Once properly connected, FileZilla should look like this:

[Image]

5. Drag and drop your files across the two panels to transfer files.

[Could add another image here]

> Job Scheduling

Introduction

Introduction to Slurm: The Job Scheduler

- Nice title and introduction!
  - Just consider making the linked text more specific "introduction" → "Introduction to Unity" (because this page is also an introduction)

Core Limits

- Good

Partitions / Queues

- Maybe be more clear on what Slurm partitions are.
- You can also get rid of "As you may have guessed, you as the user" and replace it with → "When using Slurm, you must request to use a specific partition based on what resources your job needs."
- Also, instead of linking the test "here" to the Partition List page, the link could be clearer as to what page users are being redirected to
  - → "You can find out which partition is best for your job at the [Partition List page](#) of this website."

Jobs

- The intro paragraph is good, but I would make some sentences more action-oriented so that the readers can more easily recognize which commands they should use.
  - "srun is tied to your current session, and can allow you to interact with your job. sbatch is not tied to your current session, so you can start it and walk away."
    - → "If you want to be tied to your current section and interact with your job, use scrun. If you do not want to be tied to your current session and would rather be able to start a session and walkway, use sbatch."
- You can get rid of "(see below)"

SRUN

- Move "this is highly recommended" to the beginning of the paragraph so that users are immediately drawn to it
  - → "**It is highly recommended** that you make an interactive job, which will allow your job to take input from your keyboard."

SBATCH

- Good

TMUX SRUN

- Should a sentence or two be added here introducing tmux
- Also, it might be helpful for the previous sections include a demonstration of using the commands

OnDemand

- Needs a heading – "Using Unity OnDemand to access Slurm"
- Nice helpful first sentence
- Great section

Job Composer

- Consider resizing the images so that they are not overly big. It is easy to miss the text/steps in between pictures.
- Can get rid of "You can…" and just start with "Open that job composer by …"
- Put space between the first screenshot and "It should open a new tab that looks like this:" (or shrinking the image may help that text stand out more).

- Also consider being specific about what the tab looks like, rather than saying "this" and referring to the image. For example:
  - A new window opens that shows previous jobs that have been created, with options at the top of the window for you to:
    - Add **New Job**
    - **Edit Files**
    - See **Job Options**
    - **Open Terminal**

Job Templates

- "You can…" → "Open the job templates by…"
- Put space between the first screenshot and "It should open a new tab that looks like this:" (or shrinking the image may help that text stand out more).
- Again consider being specific about what the tab looks like, rather than saying "this" and referring to the image. For example:
  - The window changes to show the different job templates, with options at the top of the window for you to:
    - Add **New Template**
    - **Copy Template**
    - **View Files**
    - **Create New Job**
- Minor wording/sentence changes for a more concise read:
  - → "We have a number of job templates at your disposal. Select a template and copy it to your home directory with the `Copy Template` button. A copy of that template appears in the list with a source of `My Templates` rather than `System Templates`. Select your copy, `View Files`, and edit the job. When you're satisfied, select Create `New Job`."

Active Jobs

- "Open it by…" → "Open the Active Jobs page by…"
- Put space between the first screenshot and "It should open a new tab that looks like this:" (or shrinking the image may help that text stand out more).
- Again consider being specific about what the tab looks like, rather than saying "this" and referring to the image. For example:
  - The window changes to show the active jobs that are running and information about the job itself, such as:
    - ID
    - Name
    - User

- Account
- Time Used
- Queue
- Status
- Cluster
- Actions
  - There is the option to **Delete** the job under **Actions** and at the bottom of the window, or to **Open in File Manager.**

SRUN

Using SRUN to Submit Jobs

- Great heading – action-oriented and specific
- It might be helpful to include a link to this page in the introduction page of this job scheduling section (where SRUN is first introduced)
- Nice intro paragraph
  - Can get rid of "so-called"

SBATCH

Using SBATCH to Submit Jobs

- Nice intro
- It may be important to put the sentence "The status of a job can be seen using squeue while it is pending or running and sacct at any time" into the last page's (SRUN) intro as well.
- Minor sentence structure changes to "The following is an example of a batch script. Please note that the top of the script **must** start with `#!/bin/bash` (or whatever interpreter you need, if you don't know, use bash), and then immediately follow with `#SBATCH <param>` parameters. An example of common SBATCH parameters and a simple script is below, this script will allocate 4 CPUs and one GPU in the GPU partition."
  - → The following is an example of a batch script. Please note that the top of the script **must** start with `#!/bin/bash` (or whatever interpreter you need – if you don't know, use bash), and then immediately followed by the `#SBATCH <param>` parameters. The example below includes common SBATCH parameters and a simple script. This script will allocate 4 CPUs and one GPU in the GPU partition.

MPI

Running Jobs on **Multiple** Nodes Using MPI

- Typo in the heading: Multple → Multiple
- This section is a little unclear to me as well
- There needs to be more description on this page about what we are delving into
    - The headings seem randomly placed
- "This is the simplified sanity check that the Unity admins used to verify that MPI is working:"
    - Unclear to me, and the note that is placed right after this kind of disorients you
- Suggestions:
    - I would recommend adding a general/broad intro to this page after "Running Jobs on Multiple Nodes Using MPI." It should (briefly) introduce what MPI is and why it is important to verify that it is working
    - Then the next heading could be: "How to verify that MPI is working" with a brief explanation where you could mention that it is a simplified sanity check done by Unity admins, etc. – then the Note box
        - Is the note box showing how to verify that it's working? If so, separate the actual command example from the "We recommend …" note

Srun

- Specify this heading – it might just be my lack of knowledge on the subject, but it was at first unclear to me what this section is showing. I wasn't sure if it was showing how to verify that MPI is working using the srun command, or how to actually run the jobs.
    - Specify within the headings so that the action that is being shown is automatically clearer to readers

Sbatch

- Same as srun section above

Frequently Asked Questions

- Nice! Useful and concise.

Software

Overview

Unity Software Overview

Means of installing packages

- There seems to be too many headings in a row here without enough information or introductory sentences to orient readers
- Under **Unity Software Overview**, there could be some general information that just tells you the software packages used
- Then, after **Means of installing packages**, there should be another couple sentences introducing readers to the different means of installing packages
  - The heading "Means of installing packages" is also a little vague – try "**Ways to install packages for Unity Software**" or "**Methods for installing packages for Unity Software**" or "**Installing packages for Unity Software**"
- The rest of this page looks good, with clear and informative sections for each component

Environment Modules

Introduction

Intro. To Environment Modules

- Nice intro blurb!
- Consider just spelling out Introduction in the heading for a more professional read
- Helpful definition of environment in this context

The PATH environment variable

- Great section! Super clear and informative.
- One suggestion would be to apply bold text to the term **executable files** in the sentence "Most of the commands you use in the shell are actually **executable files** somewhere on the filesystem" so that it stands out and is easily identifiable later in the note box.

Modules

- Great! Clear, concise, informative!
- One suggestion would be to introduce/refer to the examples that are given here.

Basic Usage

- I like that there is a table of contents included in the nav bar for this! That might be useful to implement in other sections of the site as well
- "Modules are easy to use." – Consider replacing this intro sentence with one that reiterates what modules are / are used for in this specific context of Unity.
- Great rest of the intro

List All Available Modules

- "These all do the same thing" → more specific → "Each of these commands will list the available modules:"
- "This will return an output that looks something like this:" → "The output will look something like this:"
- Could also add why/when this would be useful

Search for Modules

- Need a sentence before the command
  - "To search for modules, use this command:"
  - Could also add why/when this would be useful

Loading Modules

- Lacking some info
- Add sentence before command
  - "To load modules, use this command:"
- Add a feedback statement about what happens after you enter this command (the output)

Unloading modules

- Like above section, this part needs a sentence before command that introduces it and says why/when this is useful
- Also add a feedback statement about what happens after this command (output)

- Same as above section

List Currently Loaded Modules

- Same as above section

Module Hierarchy

- Great intro!

Here is the full Unity module hierarchy as of 2022/10/26:

- Very helpful!

Hierarchy naming scheme

- Could use an intro sentence here

How to use the hierarchy

- Looks good; useful, easy-to-follow instructions and examples

Micro-architecture

- What exactly are **micro-architecture specific modules**? Could specify in this initial paragraph

Slurm constraints

- Consider putting these three points into list form and getting rid of "You can see"
  - List all possible constraints with the `unity-slurm-list-constraints` command.
  - List the nodes that meet a given constraint with the `unity-slurm-find-nodes`command.
  - See possible constraints for each node on our node list.

Sbatch script:

- I would suggest clarify what's happening in this command even if it seems straightforward

Srun interactive session:

- I would suggest clarify what's happening in this command even if it seems straightforward for here as well

Opt Out

- Why would someone want to do this if it is not recommended – what are the benefits? Consider mentioning this in the intro

Learn more

- Great!
- Consider adding linked text to the last two links (to make it clear where it will send you)

Conda

Using Conda Environments

Introduction

- "Conda environments can be created for any software set, and can be enabled/disabled dynamically not unlike modules."
  - → " Conda environments can be created for any software set. Similarly to modules, conda environments can be enabled and disabled dynamically."
- "On Unity we use Miniconda, as opposed to Anaconda. From a user's perspective they can be considered to be the same thing."
  - → "On Unity, we use Miniconda instead of Anaconda. Miniconda is a lightweight version of Anaconda, meaning it contains less pre-installed packages."
    - Just being straightforward about the differences between Anaconda and Miniconda so that users can have that contextual understanding

Setup

- Looks good.

Creating an Environment

- Move "This creates an environment in your home folder …" above the command and change to → "To create a conda environment in your home folder, specifically `/home/$USER/.conda/envs/<name>`, use the following command:"

- → "You can also create environments in other directories, such as your PI's work directory. To do so, use the following command:"
- The Note: "The $USER environment variable evaluates to your username"
  - I think there is a better word than "evaluates" – "refers to"?
    - Or are they supposed to replace $USER with their username – if so, clarify that

Activating an Environment

- Consider using more specific/direct and complete sentences here:
  - "Environment created with –name:" → "To activate an environment created with –name, use:"
  - "Environment created with –prefix:" → "To activate an environment created with –prefix, use:"
- Use present tense for feedback statements and edit wording:
  - "Your currently active conda environment will appear in parentheses to the left of your command line prompt:" → "The conda environment that is currently active appears in parentheses to the left of your command line prompt, as shown here:"

Adding Packages to your Environment

- Intro sentence: "Use the following command to add packages to your environment:"
- For this section and the next three sections (List available, List packages, Delete) consider adding a sentence or two about when/why these commands are useful

List Available Environments

- Intro: "Use the following command to list all available environments:"

Delete an Environment

- Intro: "Use the following command to delete a conda environment:"
- "If your environment was added to JupyterHub, you will have to remove it manually." → "If your environment was added to JupyterHub, you must remove it manually using the following command:"

Conda Environments and Jupyter

- Just add the word "also" and change "it's" to "its"→ "This must be done in the command line, but JupyterHub also provides a command line interface in its 'Terminal' app."
  - Also consider inserting a screenshot of the 'Terminal' app

Adding your Environment to JupyterHub

- I don't think the Note box is necessary for this information – bolding that first sentence should be sufficient
- You could even number these steps to reduce skimming / confusion:
    1. Make sure your environment is activated. Without a currently active environment, conda will attempt to modify the main default environment, and your permission will be denied.
    2. Use the following command to install kernelspec (Kernel Specification):
        a. Command
        b. Consider explaining this step a bit more
    3. Use the following command to add a kernelspec to your JupyterHub:
        a. Command
    4. Reload the JupyterHub page, or restart your JupyterHub server.

GUI Apps via OnDemand

- Great introductory sentences!
- The heading **GUI Apps via OnDemand** is a little unclear at first – maybe "Using GUI Apps via Unity OnDemand"
- Consider adding another heading to indicate that your are beginning a short step-by-step (maybe "Running a Job using GUI Apps")
- Consider numbering the steps and changing some wording choices/break up steps:
    1. In Unity OnDemand, click on [Interactive Sessions](). Your window changes to show your interactive apps and sessions.
    2. Select an app from the list on the left. A form opens.
    3. Select the resources you would like to schedule, such as CPU threads, time, and GPU's, and leave any fields blank that do not apply.
    4. Click Launch. You are brought back to My Interactive Sessions, and your job appears in the queue.
        a. Image

        When the job has left the queue, the status changes from Queued to Starting to Running, and a blue button appears at the bottom of the job card.

        b. Image

    5. Click the blue button that appears at the bottom of the job card to connect to your job.
        a. Image

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FAQ

- "How do I connect to, and start using the cluster?" → "How do I connect to the cluster and begin using it?"
  - Be more clear/descriptive about where the links bring you: "Refer to connection instructions on connecting here" → "To connect to the cluster, see the [instructions on using an SSH connection](#)."
  - Also – aren't there other ways to connect? Should mention those as well.
- "When I connect over SSH I get a message saying…"
  - Put this into question form → "Why do I get a message saying permission denied (public key) when I connect over SSH?"
  - Also missing the word "to" in the next line here: "This can be due one of these common reasons" → "This can be due **to** one …"
- Where can I find software to use on the cluster?
  - Consider listing the recommended commands as bullet points (last three sentences).
- I'm looking for xyz software, could you install it?
  - "If this is the case we will install it for you, just send us an email at hpc@umass.edu titled "software request: \<name>"."
    - → "If this is the case for the software you are looking for, we will install it for you. Just send us an email at hpc@umass.edu, and title the email: "software request: \<name>"."
- Can I run containers on Unity?
  - Run "module load singularity" to access it. → should "module load singularity" be formatted as code like the other commands?
- How much storage do I get on Unity, and is it backed up?
  - Add comma before 'and'
  - Be specific about links: → "Refer to our [Unity Storage](#) page for information about available storage."
- When I try to queue a job I get denied for MaxCpuPerAccount.
  - Change to question form → "Why do I get denied for MaxCpuPerAccount when I try to queue a job?"
- I'm a PI and I would like to purchase hardware to buy-in to Unity.
  - Add question → "I'm a PI and I would like to purchase hardware to buy-in to Unity. How can I do this?"

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Common terms

- Something that might be helpful in this section is including examples
    - When discussing tasks and jobs, try giving an example task or job to provide some context for the terms (small tasks vs. big tasks, etc)
- Queue – could mention when jobs might be queued
- Maybe move PI definition higher up, and add a period after "Learn more about PI's"
- Add period after "Learn more about libraries"
- Could the environment definition be a little clearer? "Set of environment variables" does not clearly explain what an environment is. Including an example might also help.
- GUI – "visual representation" is a good phrase for this
- Symlink definition may need more context – shortcut for what? An example of what that looks like?
- Parent directory definition could also be clearer – mention that the parent directory is not only above the current directory, but it also **contains** the current directory
- Root – a tree/data structure visual would be helpful here, and for this whole section in general

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Cluster Information

Node List

- "To clear confusion, a node list is below, with slurm constraints to refine your node selection." → "To help you to refine your node selection, we have provided a chart below of CPU Nodes with their slurm constraints."

Partition List

- Looks good

Storage

- Good

Snapshots

- A more specific heading might be Daily Snapshots
- This section/chart is a little confusing to me

- ○ Specifically "Self-directed restores are accomplished by accessing read-only snapshots" – can this be rewritten for clarification, and can the table below be explained a bit
  - ■ Is the table showing how to access read-only snapshots?
  - ■ Self-directed restores – does this mean restoring snapshots yourself using commands?

File Transfers

- Great top title – can get rid of the colon at the end
- I love the separate steps sectioned out
  - ○ One thing you could consider doing to improve readability is changing Step 1, Step 2, Step 3, etc. headings to **Parts**
    - ■ **Part 1: Log into Globus**
    - ■ **Part 2: Connect to the MGHPCC and Unity**
    - ■ Etc.
  - ○ Then, use a numbered list instead of a bullet list for each section:

    Part 1: Log in to Globus

    1. Go to the Globus Login Page.
    2. Use your university credentials to log in.

- (Also note the changing in wording/linked text in #1 above.)
- All steps that have an action in them should be numbered. Feedback statements, "Once you're finished logging in to each connection, the screen should look something like this:" do not need to be numbered
- "If you start typing either in the "Collection" text box, the drop-down will update and allow you to select the appropriate "Collection" (aka cluster)
- Under Step 3: Transfer files
  - ○ This line is unclear – "Click on the "Transfer or Sync to…" button. Shown in the middle here:"
    - ■ → Try "Click on the "Transfer or Sync to…" button from the right side menu. If your screen is split between two panels like in the image below, then the menu appears in the middle of the two panels."
    - ■ Insead of "Voila! The file/director will be queued up and transferred shortly!" add a feedback statement to the previous step:
    - ■ "Click on the "Transfer or Sync to…" button from the right side menu. If your screen is split between two panels like in the image below, then the

menu appears in the middle of the two panels. The file file/directory is added to the queue and begins the transfer process."

- "This guide will allow you to send data from the MGHPCC to the Unity server using scp for the purposes of transitioning"
  - Make this an intro sentence under the heading: "Send data from the MGHPCC to the Unity Server"
  - Could add links to the note bullet points (ex. link to how to set up an account)
- "Step 1."
  - Be more specific and switch to Parts: "Part 1: Logging in to the MGHPCC and generating a private/public key"
  - Then **number** the steps instead of bullet points
- Repeat this for the following steps (switch to Parts, add more specific/descriptive headings, and number the steps instead of using bullet points)
- Also try to use present tense for feedback statements, so instead of "This will generate a private/public key pair which is unique to each user" try "This generates a private/public key pair that is……."
  - You can also move these feedback statements to the steps that they are describing, rather than starting a whole other bullet point.

Cluster Updates

- Looks good!

Shared Cluster Transition

- Also looks good.