Getting started as an ISW Sysadmin

This page is still a work in progress.

More under this page

Hello there, you are probably visiting this page because you want to become a sysadmin at ISW. All the pages underneath this page will give you an introduction of the systems and tools used in our network. Please note that some pages will reference to other spaces in Confluence, if you need access please ask one of the sysadmins.

Now that you read all this, you can continue on to getting started.

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Getting started

Before starting to explore our network it might be a good idea to install some software or request some access.
In the following sections we will guide you through all these steps.

Linux systems

Almost all machines on ISW are running Linux (some BSD systems too) of which most are running a Debian-based OS (Debian or Ubuntu). So a basic understanding of Linux will be of much help. If you already know your way around Linux, you can probably skip this part.

If you don't have any experience with Linux, it's probably a good idea to play with it before going on our servers. You can easily install a Virtual Machine using VirtualBox (Free) or VMware (Paid but school has free license) on your computer on which you can completely break it and cause no harm. A easy OS is either Debian or Ubuntu. They are both free, easy to use and very similar.

Docker

Starting from 2021, ISW started making heavy use of Docker containers. They provide a quick way to deploy services, don't use that much resources compared to a VM per service. An example of what is hosted on Docker containers is:

- Website
- Authentication
- Diana's website
- Diana's examination wiki
- Discord Bot
- ...

All of those are run on a Kubernetes cluster which makes use of Docker container. However this is a more advanced topic.
If you are new to Docker check out the video below for a quick introduction:

Hashicorp Boundary

One of the most important things you will need is Hashicorp Boundary.
You can download it at https://www.boundaryproject.io/.

What is it?

To explain it very easy, Boundary is sort of a proxy. It sits between you and the server you are trying to access. Boundary has access to the server, but you don't. If you want to connect to a server from outside of our network you will have to login to Boundary after that you specify the server. Your client will connect to Boundary which will connect you to the server.

This gives some advantages:

- There is no need for public facing control ports like SSH except for Boundary itself
- People are authenticated based on their credentials

- We can authorize people, giving some more access than others.

How do I install my client to work with ISW's Boundary

See the documentation on our private space.