Important cybersecurity tools

Core cybersecurity knowledge and skills

- Video: Introduction to Linux, SQL, and Python
 3 min
- Reading: Use tools to protect business operations
 20 min
- Practice Quiz: Test your knowledge:
 Core cybersecurity knowledge and
 skills
 4 questions
- Reading: Create a cybersecurity portfolio
 20 min
- Quiz: Portfolio Activity: Draft a professional statement 5 questions
- Reading: Portfolio Activity
 Exemplar: Draft a professional statement
 10 min

Review: Cybersecurity tools and programming languages

Congratulations on completing Course 1!

Create a cybersecurity portfolio

Throughout this certificate program, you will have multiple opportunities to develop a professional cybersecurity portfolio to showcase your security skills and knowledge.

In this reading, you'll learn what a portfolio is and why it's important to develop a professional cybersecurity portfolio. You'll also learn about options for creating an online or self-hosted portfolio that you can share with potential employers when you begin to look for cybersecurity jobs.

What is a portfolio, and why is it necessary?

Cybersecurity professionals use portfolios to demonstrate their security education, skills, and knowledge. Professionals typically use portfolios when they apply for jobs to show potential employers that they are passionate about their work and can do the job they are applying for. Portfolios are more in depth than a resume, which is typically a one-to-two page summary of relevant education, work experience, and accomplishments. You will have the opportunity to develop a resume, and finalize your portfolio, in the last course of this program.

Options for creating your portfolio

There are many ways to present a portfolio, including self-hosted and online options such as:

- Documents folder
- Google Drive or Dropbox[™]
- Google Sites
- Git repository

Option 1: Documents folder

Description: A documents folder is a folder created and saved to your computer's hard drive. You manage the folder, subfolders, documents, and images within it.

Document folders allow you to have direct access to your documentation. Ensuring that your professional documents, images, and other information are well organized can save you a lot of time when you're ready to apply for jobs. For example, you may want to create a main folder titled something like "Professional documents." Then, within your main folder, you could create subfolders with titles such as:

- Resume
- Education
- Portfolio documents
- Cybersecurity tools
- Programming

Setup: Document folders can be created in multiple ways, depending on the type of computer you are using. If you're unsure about how to create a folder on your device, you can search the internet for instructional videos or documents related to the type of computer you use.

Option 2: Google Drive or Dropbox

Description: Google Drive and Dropbox offer similar features that allow you to store your professional documentation on a cloud platform. Both options also have file-sharing features, so you can easily share your portfolio documents with potential employers. Any additions or changes you make to a document within that folder will be updated automatically for anyone with access to your portfolio.

Similar to a documents folder, keeping your Google Drive or Dropbox-based portfolio well organized will be helpful as you begin or progress through your career.

Setup: To learn how to upload and share files on these applications, visit the Google Drive and Dropbox websites for more information.

Option 3: Google Sites

Description: Google Sites and similar website hosting options have a variety of easy-to-use features to help you present your portfolio items, including customizable layouts, responsive webpages, embedded content capabilities, and web publishing.

Responsive webpages automatically adjust their content to fit a variety of devices and screen sizes. This is helpful because potential employers can review your content using any device and your media will display just as you intend. When you're ready, you can publish your website and receive a unique URL. You can add this link to your resume so hiring managers can easily access your work.

Setup: To learn how to create a website in Google Sites, visit the Google Sites website.

Option 4: Git repository

Description: A Git repository is a folder within a project. In this instance, the project is your portfolio, and you can use your repository to store the documents, labs, and screenshots you complete during each course of the certificate program. There are several Git repository sites you can use, including:

- GitLab
- Bitbucket[™]
- GitHub

Each Git repository allows you to showcase your skills and knowledge in a customizable space. To create an online project portfolio on any of the repositories listed, you need to use a version of Markdown.

Setup: To learn about how to create a GitHub account and use Markdown, follow the steps outlined in the document <u>Get started with GitHub</u>.

Portfolio projects

As previously mentioned, you will have multiple opportunities throughout the certificate program to develop items to include in your portfolio. These opportunities include:

- Drafting a professional statement
- Conducting a security audit
- Analyzing network structure and security
- Using Linux commands to manage file permissions
- Applying filters to SQL queries
- Identifying vulnerabilities for a small business
- Documenting incidents with an incident handler's journal
- Importing and parsing a text file in a security-related scenario
- Creating or revising a resume

Note: Do not include any private, copyrighted, or proprietary documents in your portfolio. Also, if you use one of the sites described in this reading, keep your site set to "private" until it is finalized.

Key takeaways

Now that you're aware of some options for creating and hosting a professional portfolio, you can consider these as you develop items for your portfolio throughout the certificate program. The more proactive you are about creating a polished portfolio, the higher your chances of impressing a potential employer and obtaining a new job opportunity in the cybersecurity profession.