



Guidelines for Creating a File Naming Schema

A file naming schema, or convention, is a framework for naming your files in a way that describes what they contain and how they relate to other files. File naming schemas can make it easier for you to work with your data and greatly assist potential re-users in navigating through your files and finding the information they want. Below are questions designed to help you consider what information you might need to include in such a schema. Ask yourself each question and write down your answer, combining all the elements into a documented schema. There are also best practices for you to consider for file naming and organizing a directory structure.

Best Practices

- Be consistent in the application of your naming schema, especially when multiple people are expected to apply a convention (such as in a collaboration).
- When using sequential numbering, use leading zeros. This allows files to sort well and have consistent name lengths.
- Limit file names to 32 characters or less. The longer the filename, the longer the file path to type. Shorter names are easier to quickly scan to know what file is.

Questions for Formulating a File Naming Convention

- What group of files will this naming convention cover? You can use different conventions for different file sets or use similar conventions for similar groups of files.
- What information is important about these files and makes each file distinct? Ideally, this will be three to five pieces of metadata or characteristics.
- Do you need to abbreviate any of the metadata or encode it? When distinct information is described by a lot of text, consider shortening them or standardizing categories with two- or three-letter codes.
- What is the order for the metadata in the file name? This can help with searching and sorting, and it is important for the order to be consistent.
- What characters will you use to separate each piece of metadata in the file name? Underscores are recommended and best practice is to use only numbers, letters, or underscores in the file names.
- Will you need to track different versions of each file? You can use version numbers, dates, or even different categories.

Organizing Directory Structure and File Folder Organization

- Organize folders into meaningful categories:
 - When choosing a directory naming convention, follow the same approach as file naming by determining your unique elements and considering ordering and abbreviations. If you find a system that works well for you or a type of project, consider a template to describe the system.
- Best practices for folder and sub-folder organization:
 - Avoid overlapping categories, such as multiple folders named "Data"
 - Don't let your folders get too large
 - Don't let your structure get too deep
- Create a README. Part of the using a directory structure and file naming convention is documenting it so that someone unfamiliar with your project can look at your documentation and computer files and understand in detail what you did and why. This README should be in the root of the directory it describes.