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Scaling Up with Simulink

When Simulink® projects scale up and involve more collaborators, design challenges become more frequent. This cheat sheet offers practical guidance for managing components, data, and files effectively.

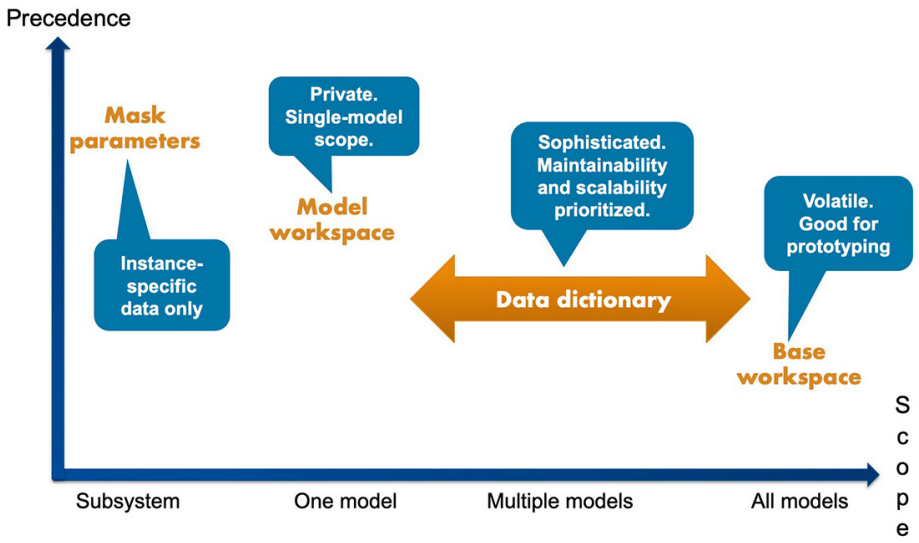
Subsystem, Libraries, Model References ... Which One Do I Pick?

If your primary goal is to...	Use...
Use accelerator mode to speed up subsequent instances/runs of a component	Model Reference
Create a version of your component with IP protection	Model Reference
Run a component as a stand-alone model	Model Reference
Create a reusable component that supports physical connection (Simscape™) interfaces	Subsystem Reference
Enable parallel development with flexible interfaces during early development stages	Subsystem Reference
Create utilities that are widely reused and change infrequently	Linked Subsystems (Libraries)
Encapsulate small pieces of code in nonreusable packages	Atomic Subsystem
Visually organize a group of blocks or components	Virtual Subsystem

Where Do I Store Design Data?

Base (MATLAB) Workspace

Great for...	Not so great for...
Informal workflows	Large projects
Parameter tuning	Data scoping
Universal visibility	Parallel development



How Do I Organize, Share, and Manage Design Files?

Use MATLAB® Projects. They take care of the small stuff so you can focus on the important stuff:

Automating the setup and teardown of the environment	Performing dependency analyses on your files
Creating shortcuts to common tasks	Simplifying batch processing
Simplifying upgrades to future releases	Integrating source control into MATLAB

Learn more about scaling up with Simulink at www.mathworks.com/products/simulink/scaling-up.html.