

Time-history analysis first steps

Tutorial	
Name:	Time-history analysis first steps
Description:	Overview of the procedure for time-history analysis.
Program:	SAP2000
Version:	
Model ID:	na

[Time-history](#) analysis may be initiated using the process which follows:

1. Create the model and assign support conditions to restrained [joints](#).
2. Select Define > Functions > Time History to define a time-history function which characterizes load variation over time.
3. Assign load conditions to the model through Assign > Joint Loads *or* Frame Loads.
4. Define either a [modal](#) or direct-integration time-history [load case](#) through Define > Load Cases.
5. To customize load application, enter, on the Load Case Data form under Load Applied, the following fields:
 - **Load Type.** Select the Load Pattern option.
 - **Load Name.** Select the Load Pattern to be applied.
 - **Function.** Select the time function which characterizes load variation in time.

See Also

- [CSI Analysis Reference Manual](#) (Linear Time-History Analysis, page 353) *and* (Nonlinear Time-History Analysis, page 403)
- [Verification Examples](#)
- [Example Problems](#)
- [Multi-support excitation](#) article