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