Time-history analysis first steps

<table>
<thead>
<tr>
<th>Name:</th>
<th>Time-history analysis first steps</th>
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<tbody>
<tr>
<td>Description:</td>
<td>Overview of the procedure for time-history analysis.</td>
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<tr>
<td>Program:</td>
<td>SAP2000</td>
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<td>Version:</td>
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<td>Model ID:</td>
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**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