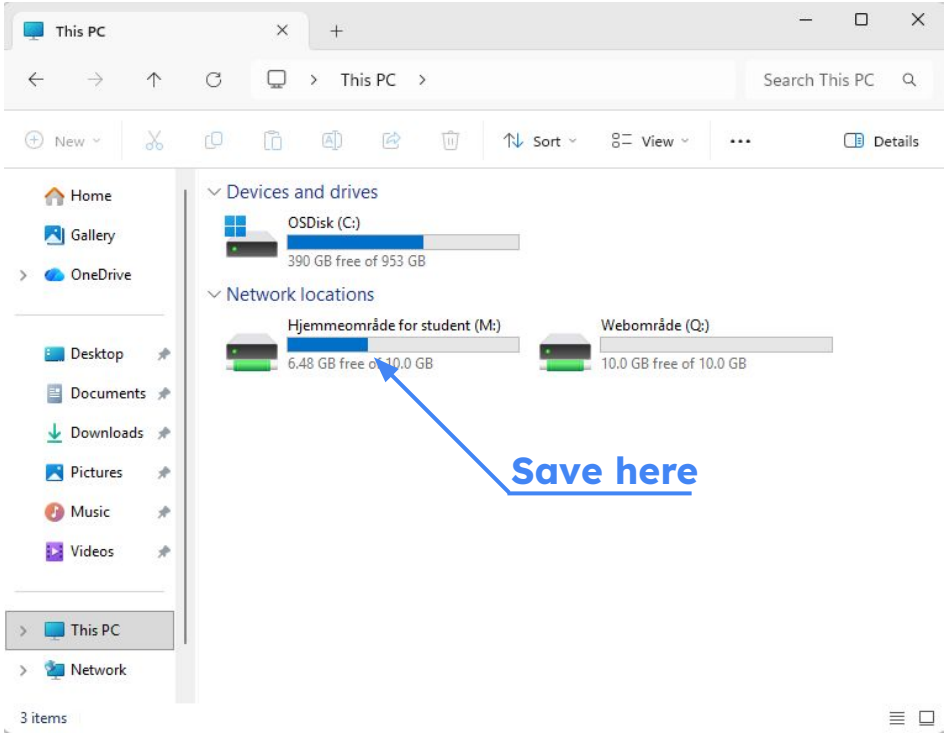
Introduction

Save file



Or:

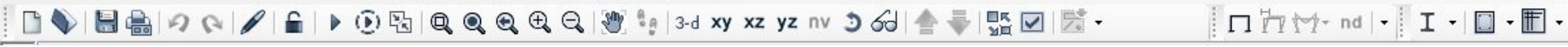
Google Drive

OneDrive

Structure/Geometry

Workflow

1. Grid
2. Materials
3. Frame Sections
4. Frame objects
5. Connections


3-d
xy
xz
yz
nv
nd

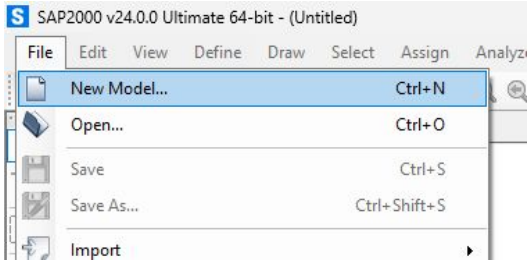

all
PS
clr

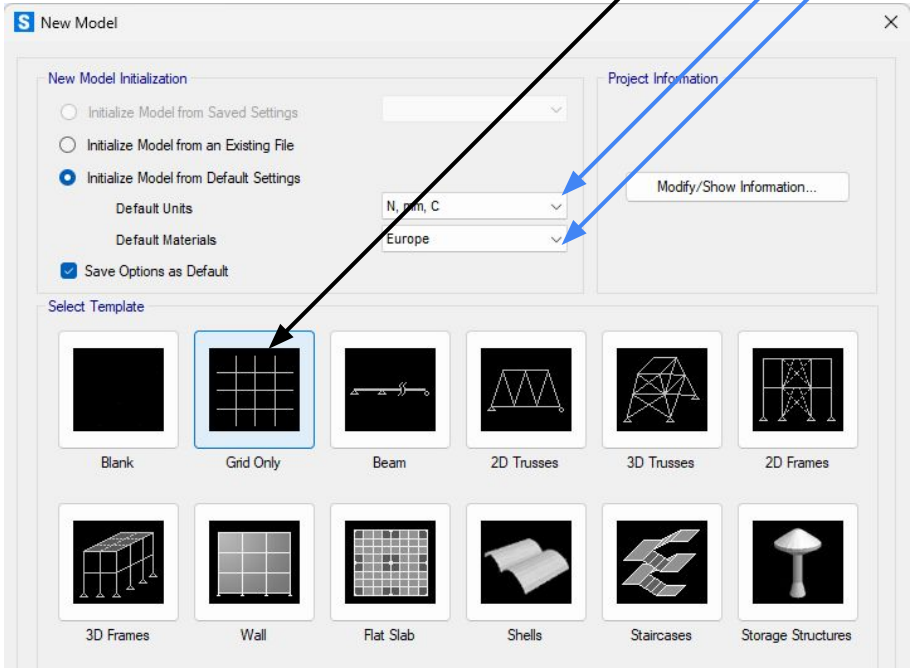
New model

Click Grid Last

N/kN

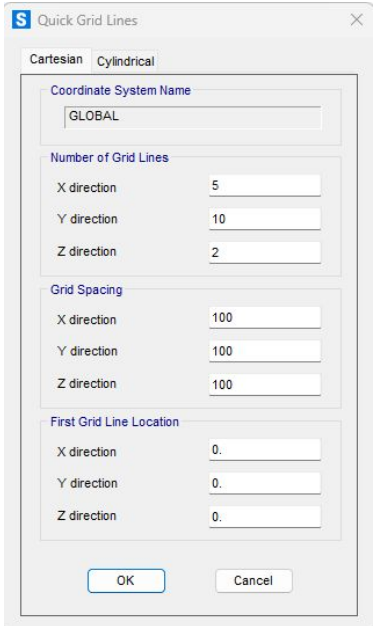
Europe

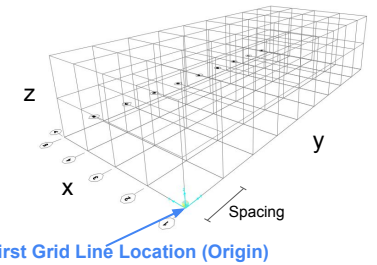




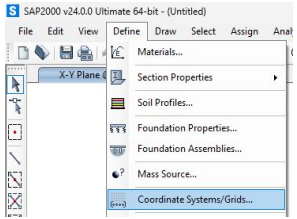
Grid Setup

Modify grid later:

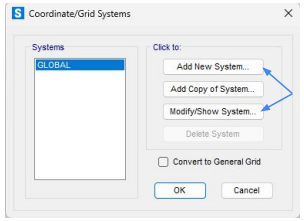




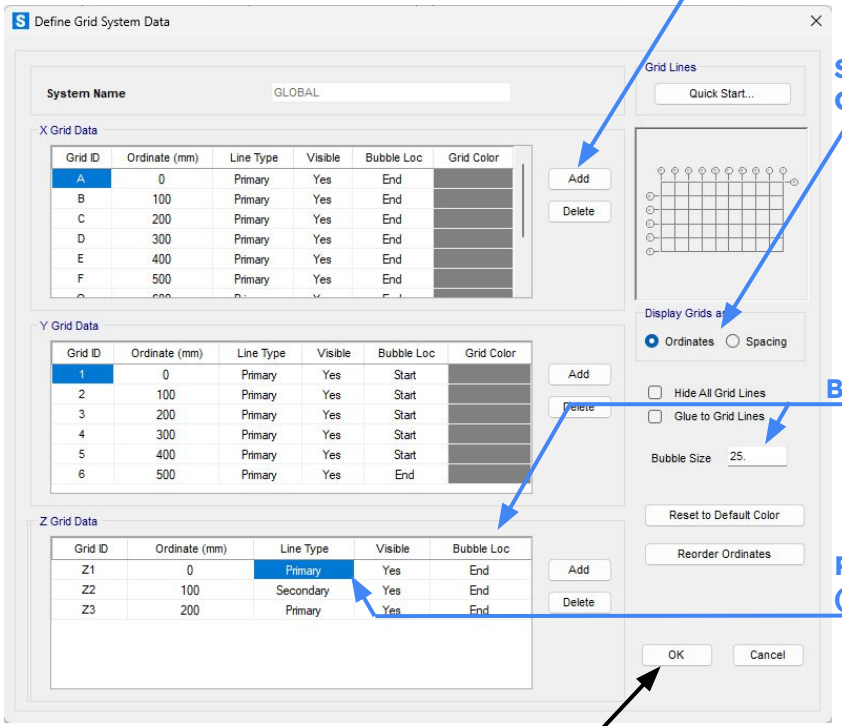
1.



2.



3.



Add Line (same spacing)

Switch Coordinates/Spacing

Bubble

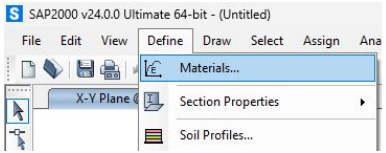
Primary (w/ Bubble)

Secondary (No Bubble)

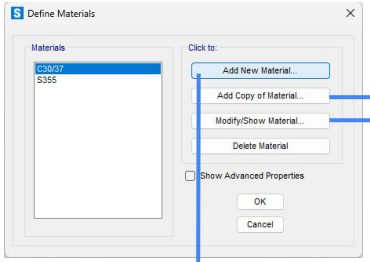
Last: OK

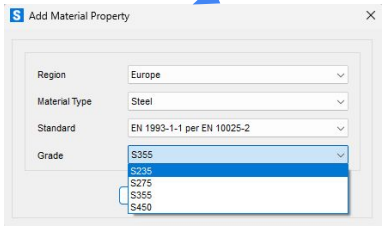
Materials

1.

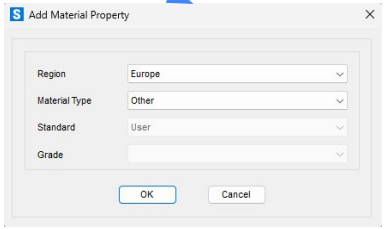


2.





Eurocode Materials



Timber and other materials

3.

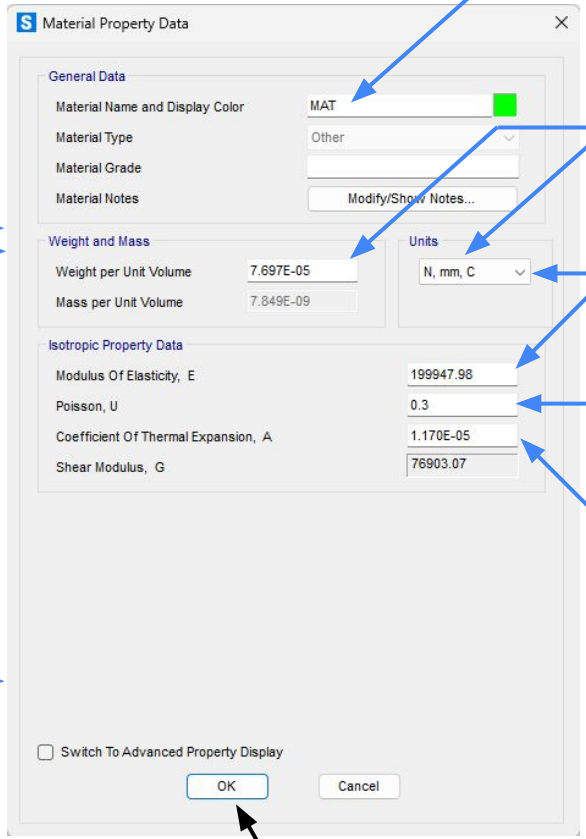
Material Name: GL24h, C24 etc.

Density (NEWTONS)

Watch units

$$\nu = \frac{\varepsilon_{\perp}}{\varepsilon_{\parallel}}$$

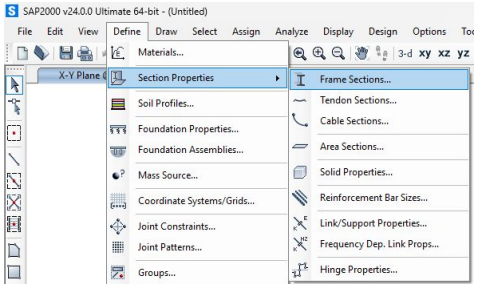
$$\alpha \cdot \Delta T = \varepsilon$$



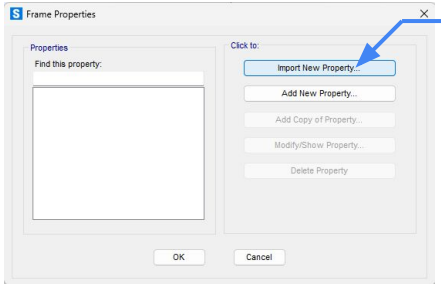
Frame sections (Cross section/tverrsnitt)

Complex sections (I, H, C)

1.

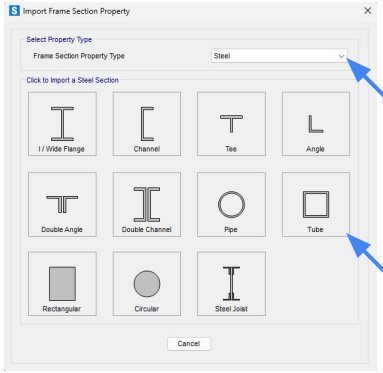


2.



Import New

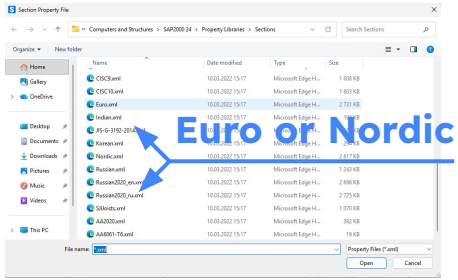
3.



Material

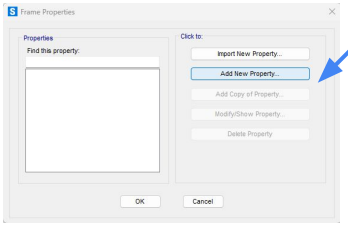
Section

4.



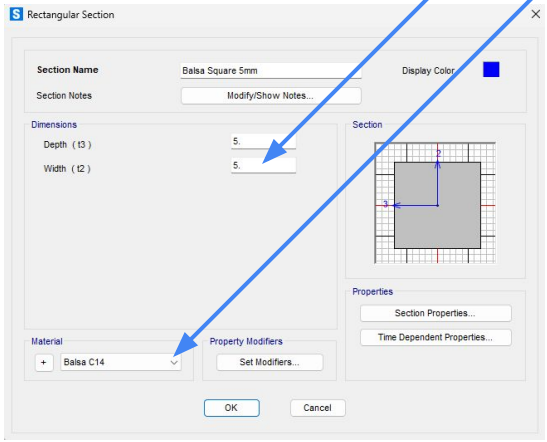
Euro or Nordic

Simple Sections (or non standard)

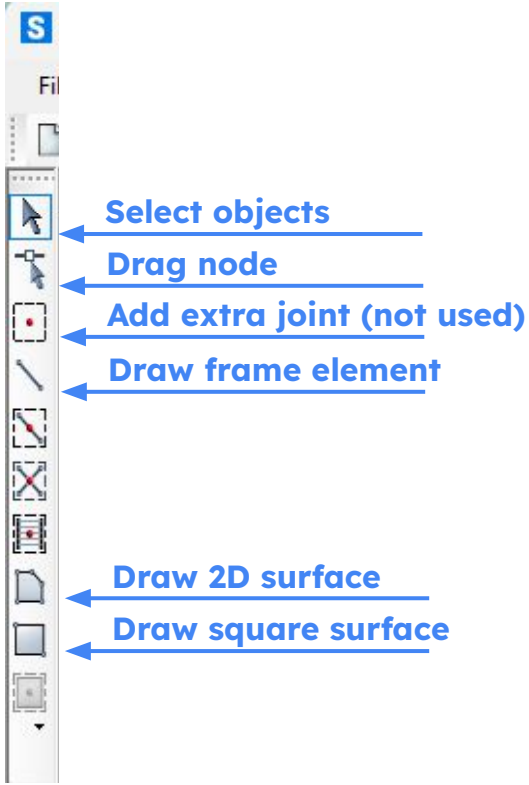


Add New

Fill out



Frame objects



Select object
Select frame or node to edit

Element drawing options

Draw frame element
Draw a frame or brace element (Ramme-element/stav).

Draw 2D surface or square
Use to draw walls/shear walls

Node snapping options: Choose after element selected

Snap to Grid (intersections)
Snaps to defined grid

Snap to perpendicular
Snaps to a point perpendicular to the frame element of the first point

Snap to ends and midpoints
Useful for Bracing/fagverk

Snap to closest (Dont use)
Snaps to closest element/mode. Only use for ideas or tests.

Snap to element intersections
Intersections between frame elements

Snap to increment
Snaps to every 0.1cm etc.

Connections

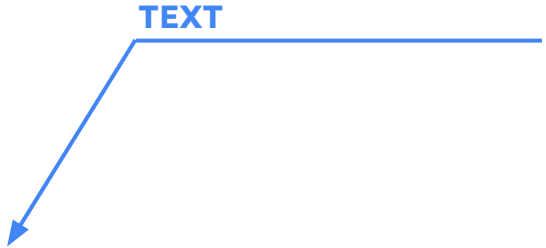
Static Analysis

Workflow

1. Loads
2. Load Combinations
3.

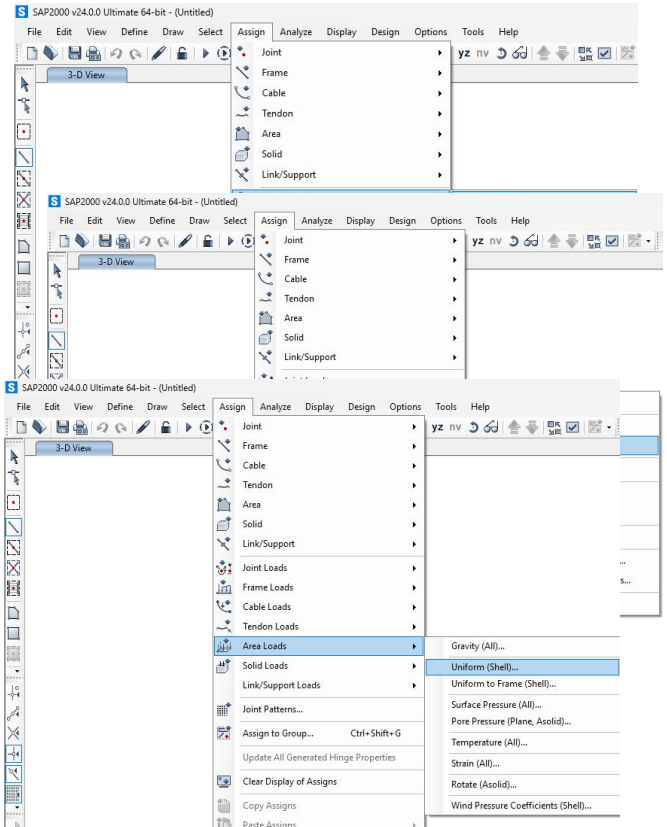
Load Combinations

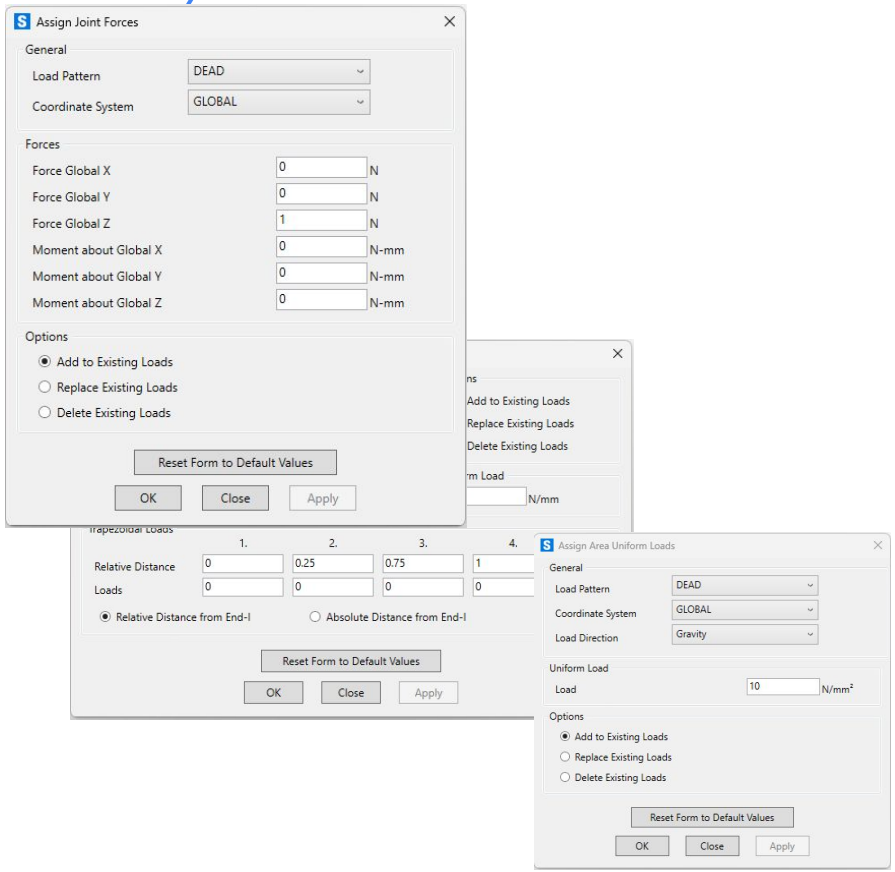
1. TEXT



Assign loads

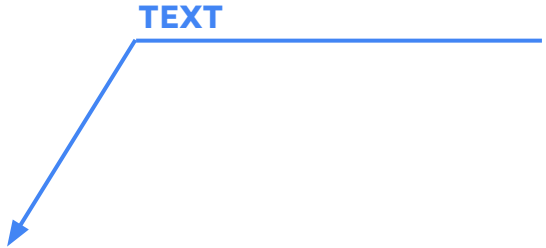
1. TEXT



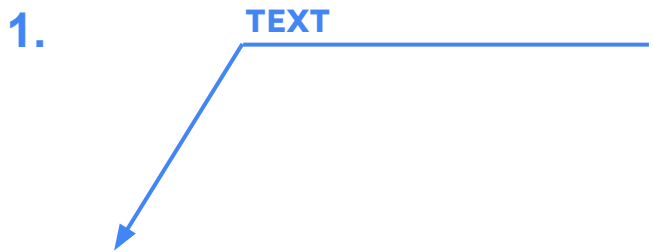


Analysis

1. TEXT



View



Dynamic Analysis

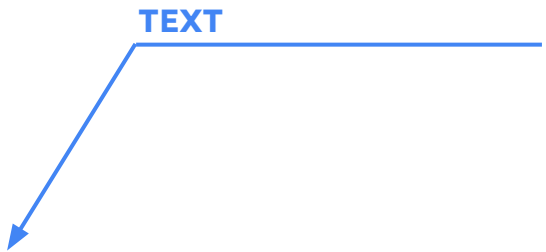
Workflow RHA

1. Mass
2. Time history
3. Load Case

Video on Response Time History (RHA) analysis
https://www.youtube.com/watch?v=VjkqA4_hlMk

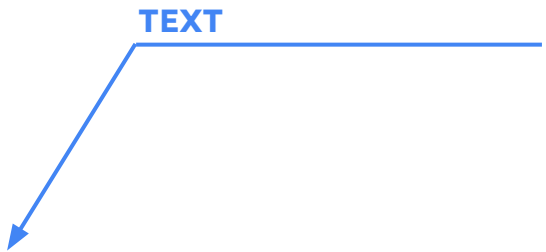
Define Mass Source

1.



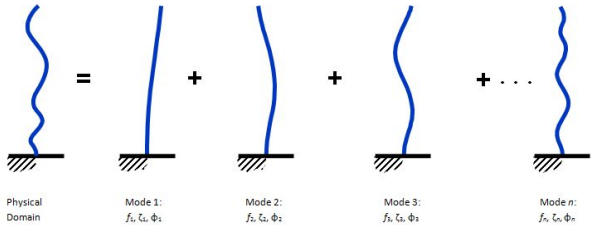
Time History

1. TEXT



Modal Load Case

Recall:



Modes refer to the structures oscillating behaviour.

1. TEXT