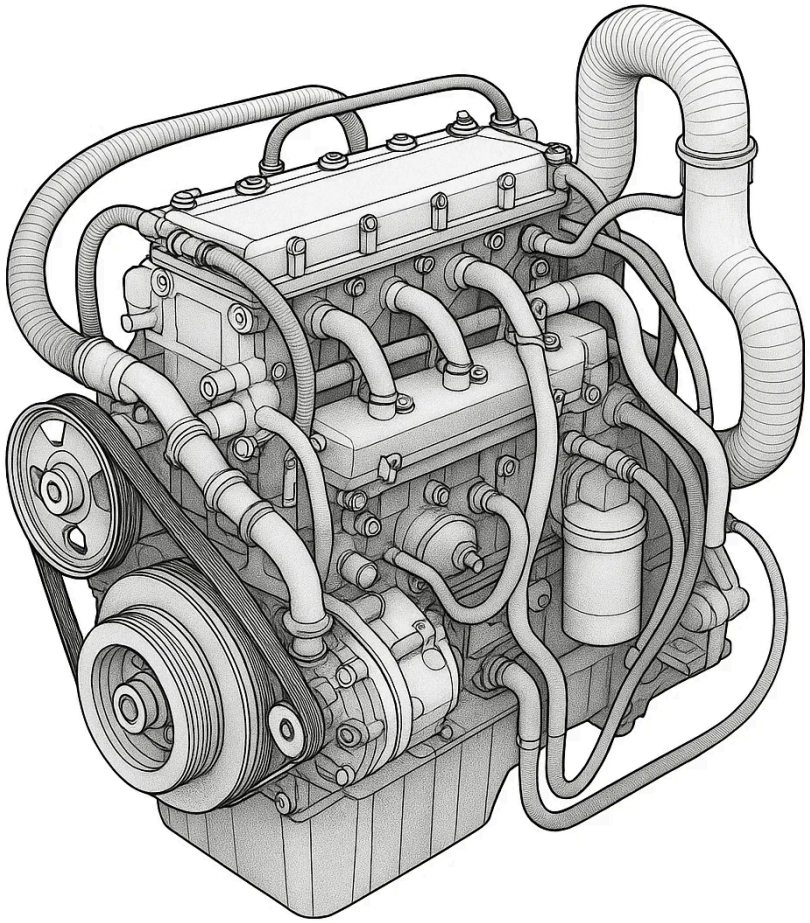
HOSE INFORMATION
NX JOURNAL API

MANUAL FOR USER

June 06th, 2025

Argentina Diaz Alvarado



INTRODUCTION

This API/Journal was developed to provide quick and easy access to tube, hose, and pipe specifications, eliminating the need for manual searches. By consolidating all relevant data in one application, it saves users time while ensuring accurate and efficient information retrieval for both internal use and customer presentations.

With this tool, users can quickly check key component features, such as:

- Total length
- Inner and outer diameter
- Expansion measurements

The API/Journal simplifies analysis and ensures reliable data sharing with customers and colleagues.

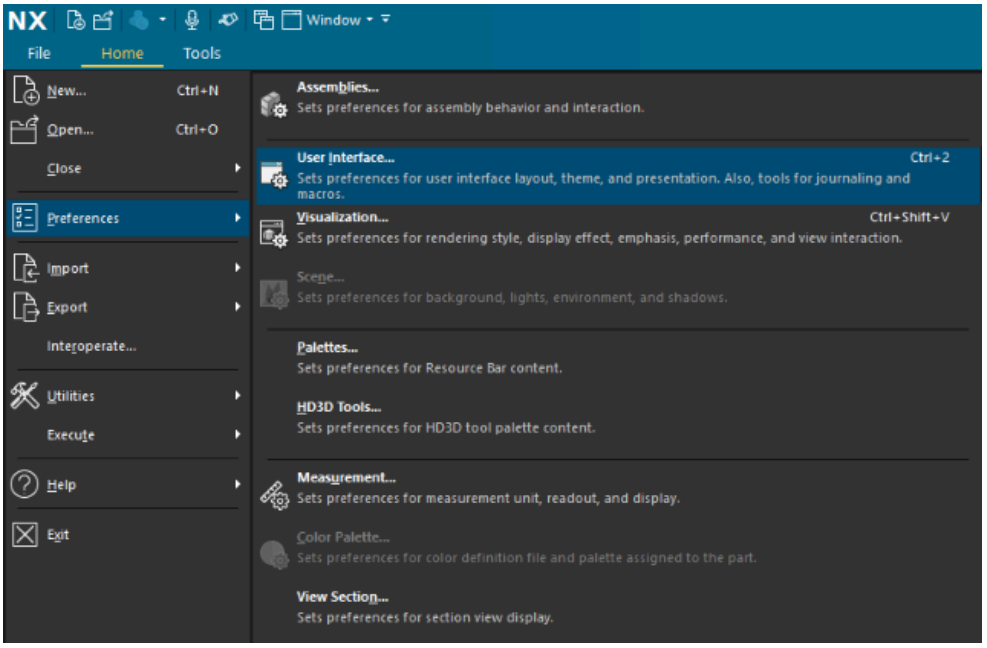
PURPOSE OF THE DOCUMENT

This document serves as a step-by-step guide to help users navigate the API/Journal efficiently. It ensures accurate data retrieval and explains each functionality clearly at every stage.

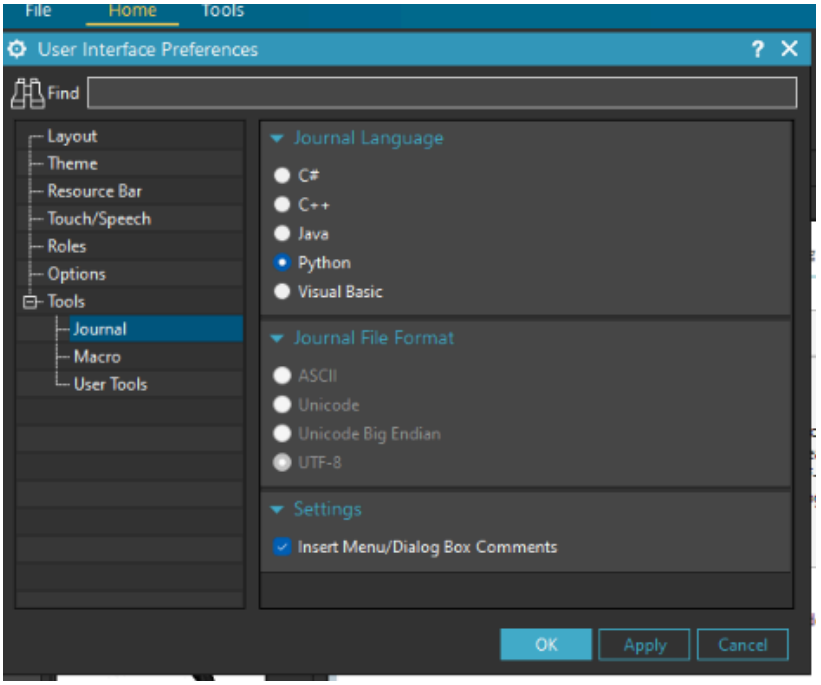
Getting Started With The Journal/API in NX

3.1 Setting up the code language inside of NX.

1. Open the NX session.
    a. Go to the File Tab, then locate Preferences > User Interface.
    b. *(Shortcut: Press Ctrl + 2 to open User Interface Preferences directly.)*



2. Access the Journal settings.
    a. In the User Interface Preferences window, navigate to the Tools section.
    b. Select Journal from the options.

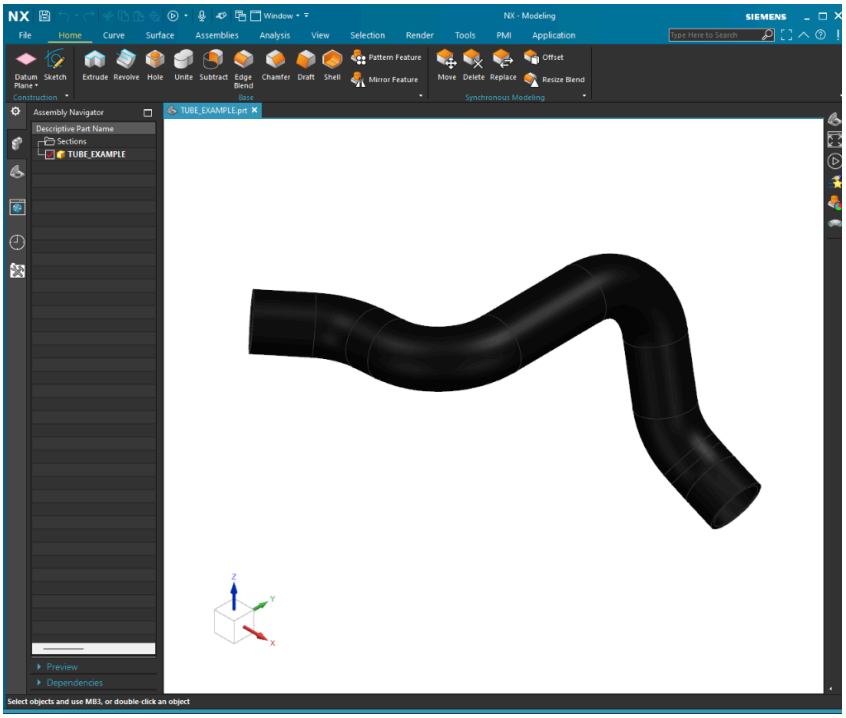


3. Select Python as the language.
    a. From the list of available code languages, choose Python (since the Journal/API is Python-based).
    b. Click OK to confirm.

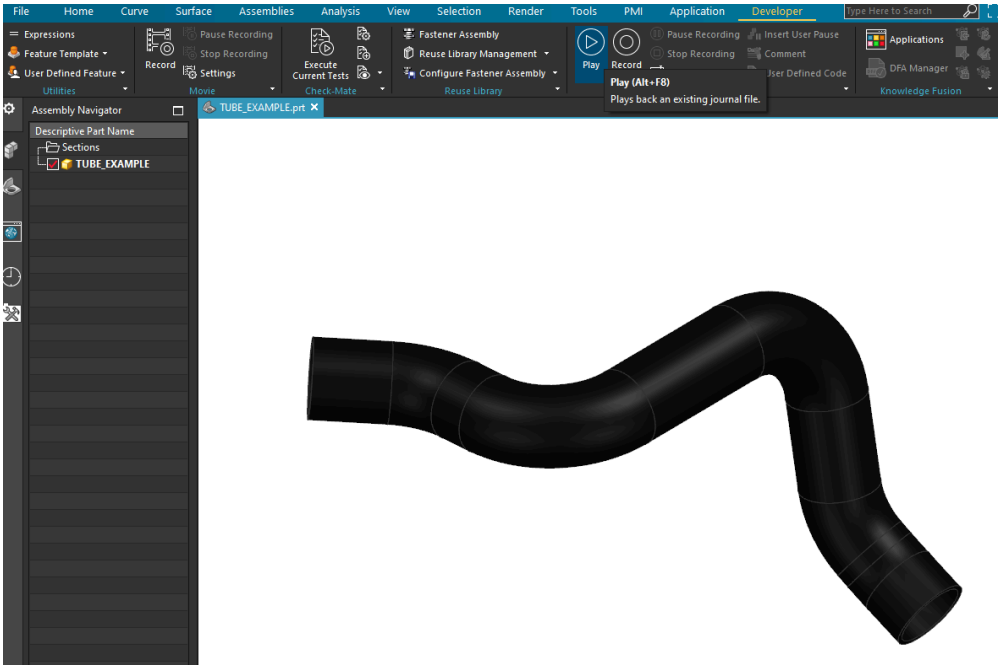
3.2 Running the program

There are two ways to execute the code in NX. Below is the most efficient method.

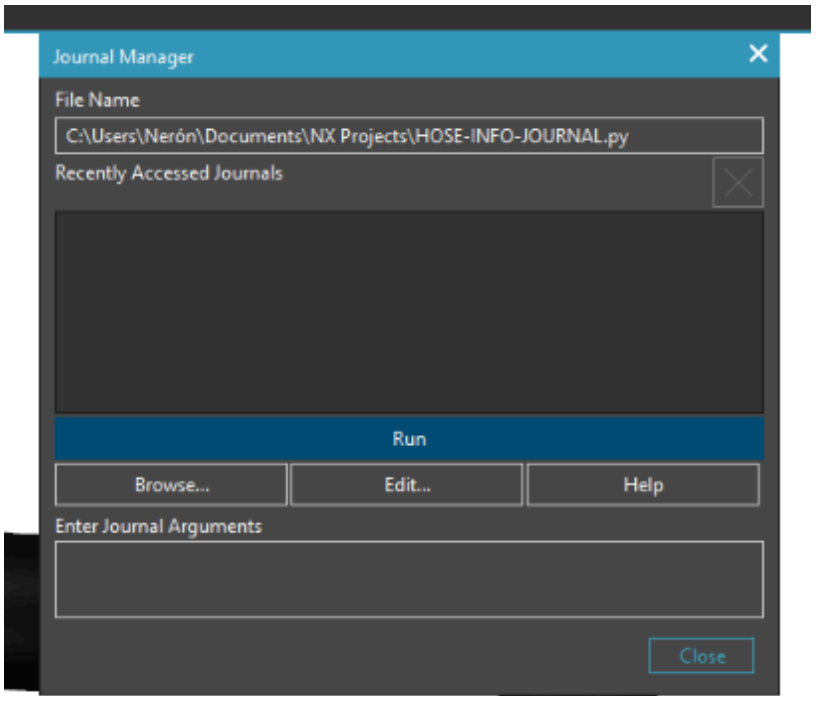
1. Open the component and configure the tab section
    a. Load the component (e.g., a hose) you want to analyze.



2. Access the Developer tab and run the journal
    a. Right-click in the workspace to open the context menu.
    b. Select Developer from the options.
    c. In the Developer section, locate the Journal panel.
    d. Click the Play button (or press Alt + F8).



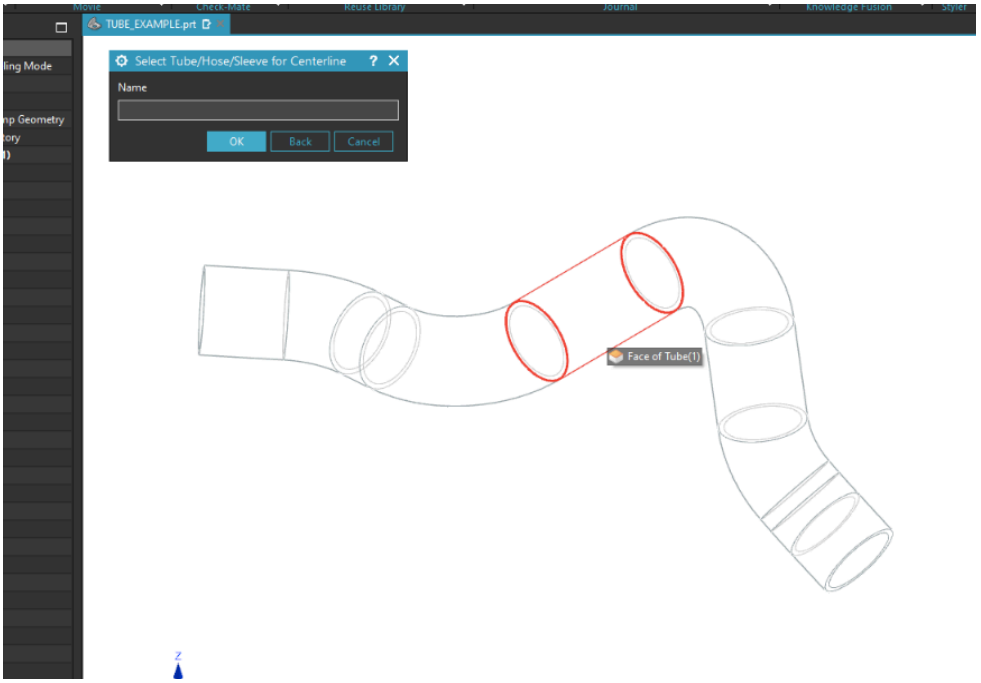
3. Select the Journal/API file.
    a. In the Journal Manager, click Browse... and navigate to your .py file.
    b. Click Run to execute the program.



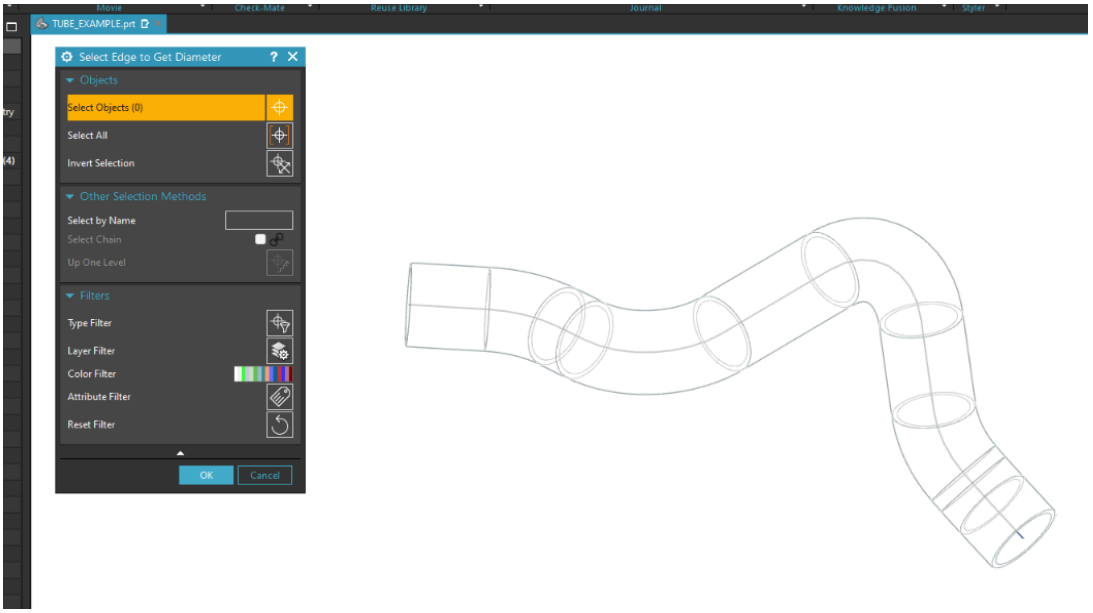
Step By Step The Journal/API

NOTE: Before starting running the Journal/API, please consider that this program will work just if the tubes/hoses/sleeves are “Tube” function made or just Body on the CAD model. If it’s an assembly with sub components, it will not work.

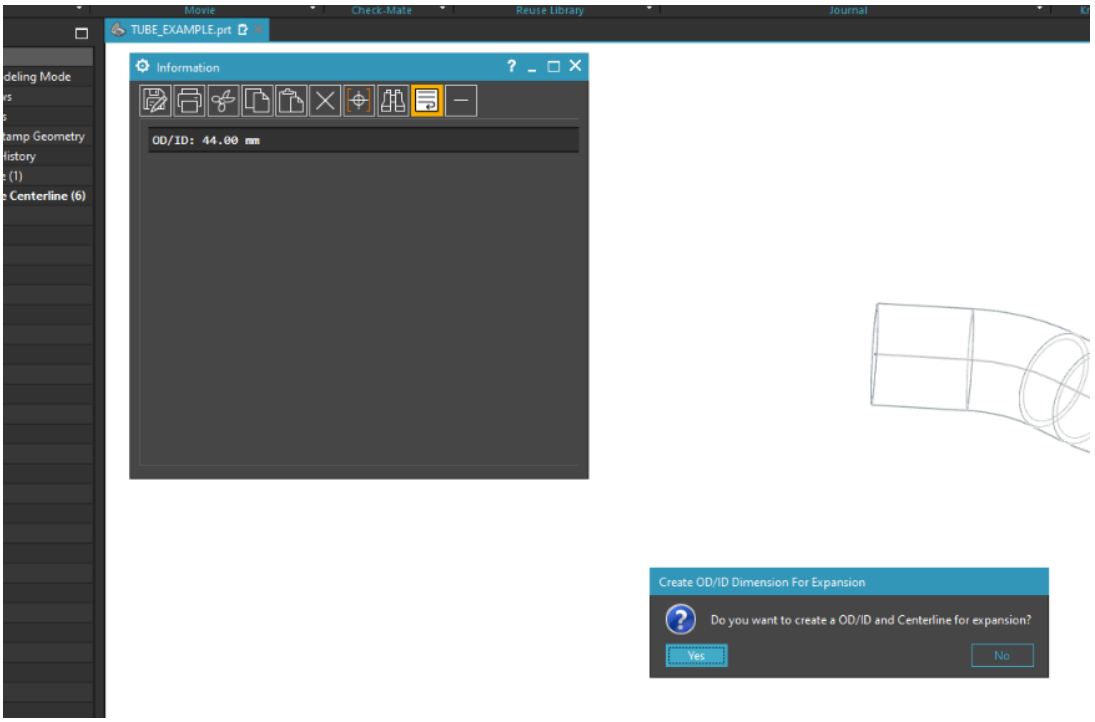
1. Select the main body.
    a. Click the primary section of the component.
    b. *Ignore expansions at this stage.*



2. Define the edge.
    a. Choose either the inner (ID) or outer (OD) edge of the main body.
    b. Click OK to confirm

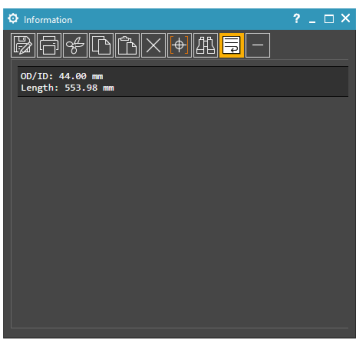


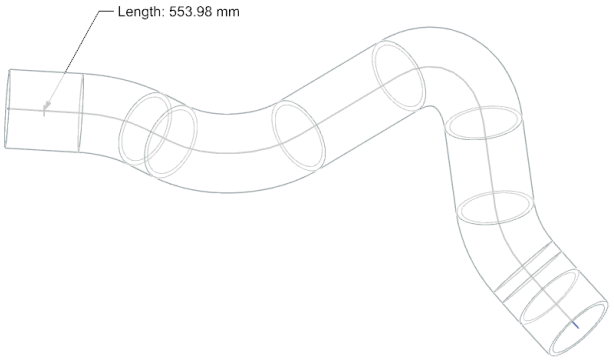
3. Handle expansions (if applicable).
    a. When prompted: Do you want to create OD/ID and Centerline for expansion?



        i. Yes: Repeat edge selection on each segment for the expansion and then OD/ID.
        ii. No: Skip to final measurements.

4. View results.
    a. The Information window will show:
        i. OD/ID lengths.
        ii. Total centerline length.
    b. A length label will auto-generate on the 3D model's centerline.





Revision Table

NAME OF CHECKER	DESCRIPTION	DATE
Argentina Diaz Alvarado	Creation of the document	June 06th, 2025