

MIDAS CIVIL NX AUTOMATION GUIDE

Tendon Copy Script

Setup & Usage Guide

1 Prerequisites & Preparing Your Model

Before running the script, make sure your setup and model meet these requirements:



midas_civil Python package installed

Installed and able to connect to your open MIDAS Civil NX session.



At least one tendon profile already created

All tendon profiles currently in the model will be copied — make sure the model contains only the tendon(s) you actually want to be copied.



Element (Structure) groups already defined, with elements assigned

Every group you want a tendon assigned to must exist with its elements already in it, and be named correctly (prefix + number — see below).

2 Configuring the Script

Set these input variables at the top of the script before running:

Variable	What it controls	Example
TARGET_GROUP_PREFIX	The prefix used to identify which groups tendons should be copied into	"G_"
TENDON_NAME_PREFIX	A short tag inserted into the name of every newly created tendon	"S", "PT", "CABLE"

New tendon IDs are automatic — no input needed:

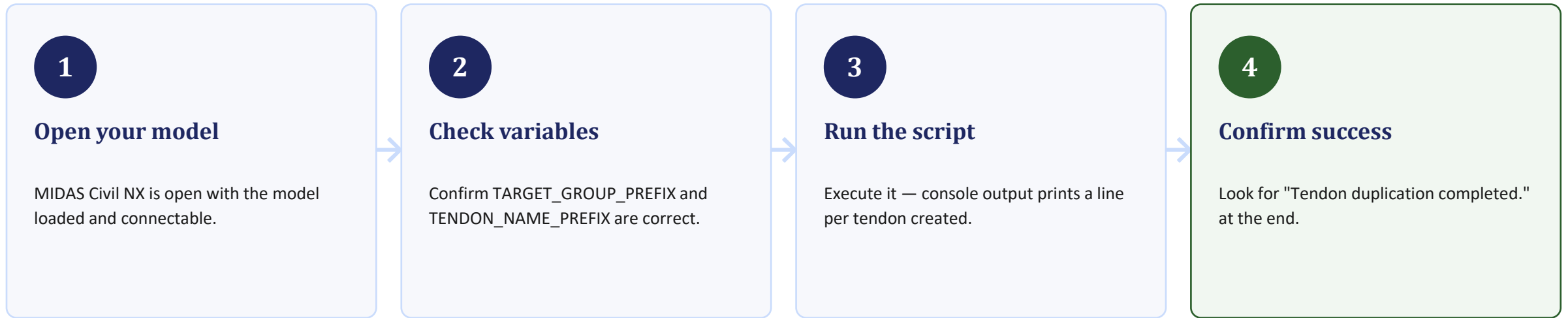
The script starts numbering new tendons from one above the highest existing tendon ID already in the model.

Resulting tendon name pattern:

```
{group_name}_{TENDON_NAME_PREFIX}_{number}
```

Example: group "G_3" + TENDON_NAME_PREFIX "S" → G_3_S_001, G_3_S_002, ...

3 Running the Script



What success looks like:

```
Created tendon profile: ID=57, NAME=G_1_S_001, assigned to group=G_1
...
Tendon duplication completed.
```