

# Capitalize on MEP Fabrication Workflow Close the Loop with Revit Detailing Customization

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# Class summary

This class is about the MEP Fabrication database customization : how to create new specifications, new services, new items from pattern templates, and so on.

The ultimate goal is to use it in Revit software, taking advantages of all new features and capabilities provided by Revit 2017 software—and figure out all the value of using fabrication content in the detailing phase to capitalize on design, optimize construction, and save costs.

This session features Revit and Fabrication CAMduct & ESTmep



# Key learning objectives

At the end of this class, you will be able to:

- customize the existing MEP fabrication shared database
- Create your own content and use it in Revit
- to capitalize on the value of using new Revit detailing capabilities
- Understand the relationships between the needs of MEP contractors and the work of MEP fabricators



# Content Creation and Management



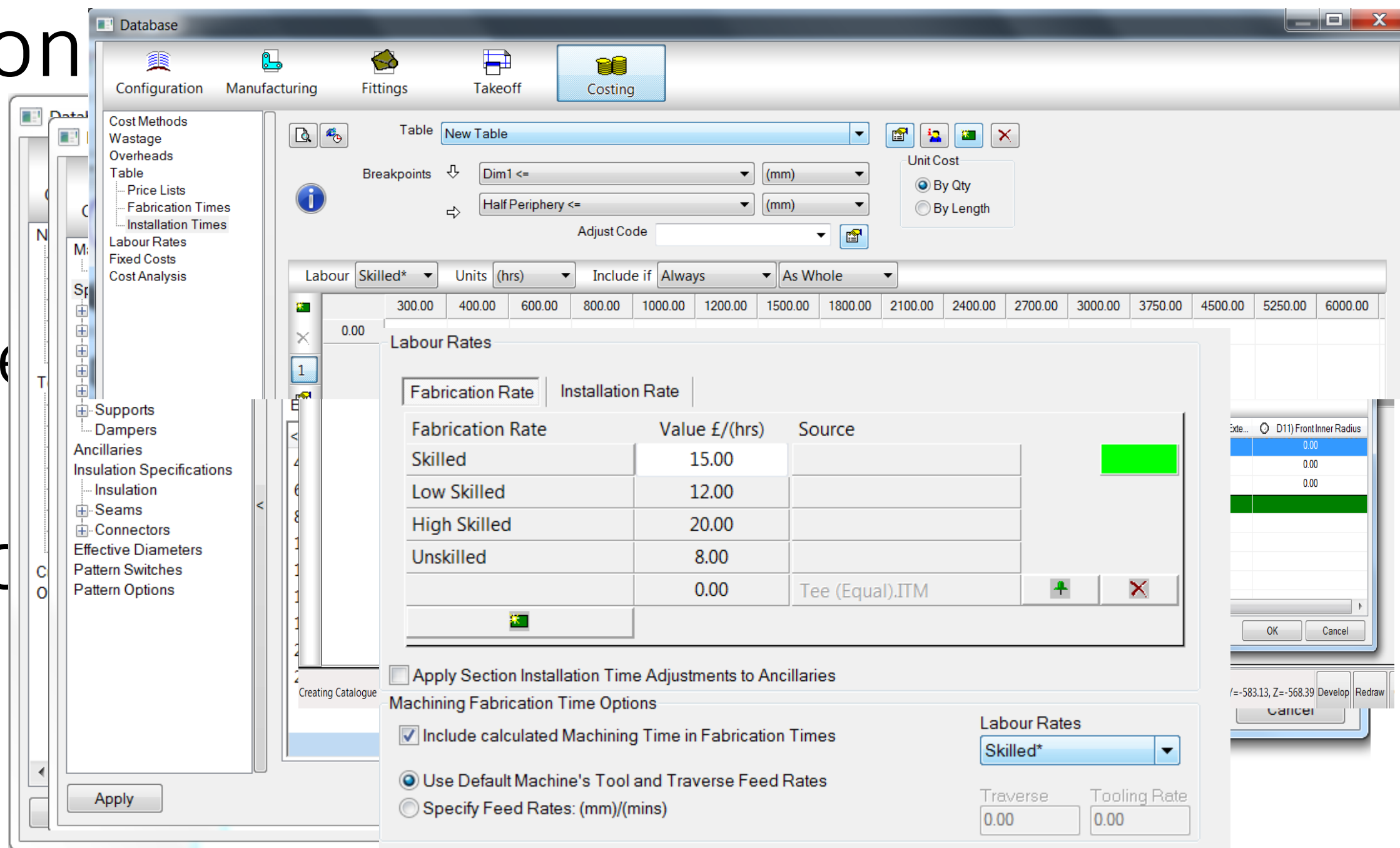
# The shared Database

- What's in :
  - Materials
    - Carbon Steel
    - Galvanized
    - Iron
    - Copper
    - PVC
    - ...
  - Cost Information
    - Installation Time
    - Fitting Time
    - Little Pipes
    - ....
  - Items
    - Duct
    - Duct fittings
    - Pipes
    - Pipes fittings
    - Valves
    - ...



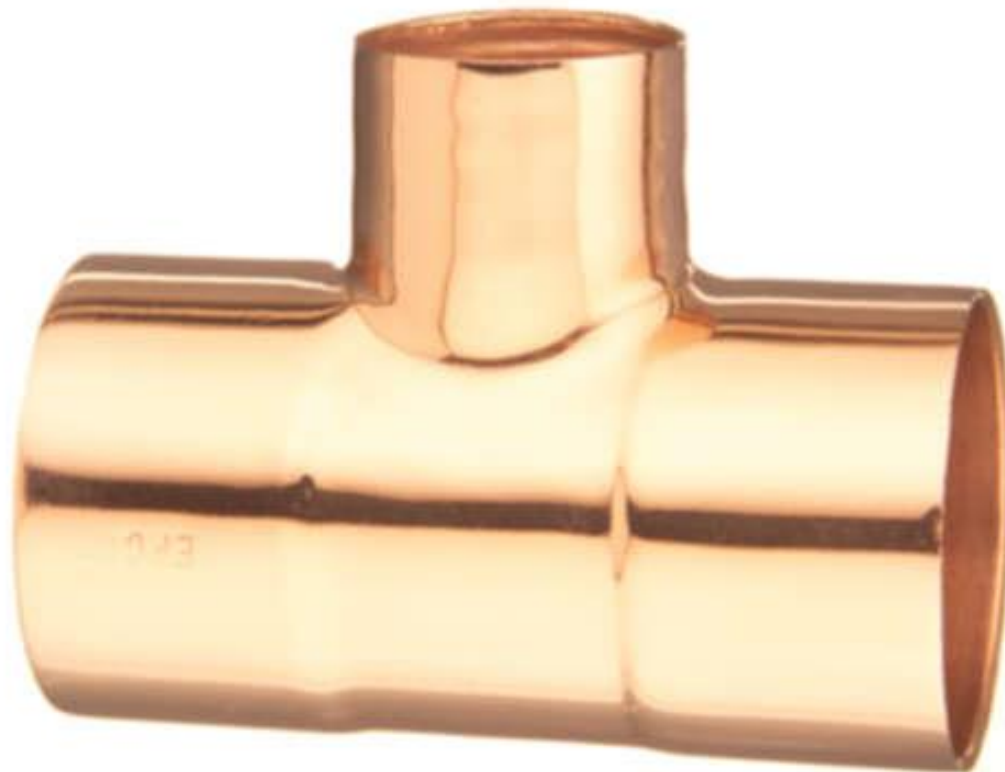
# Content Creation – only in Fabrication Products

- Material creation
- Specs creation
- Items creation
  - Based on pattern templates
- Cost Informatic



# Content Creation : New Item

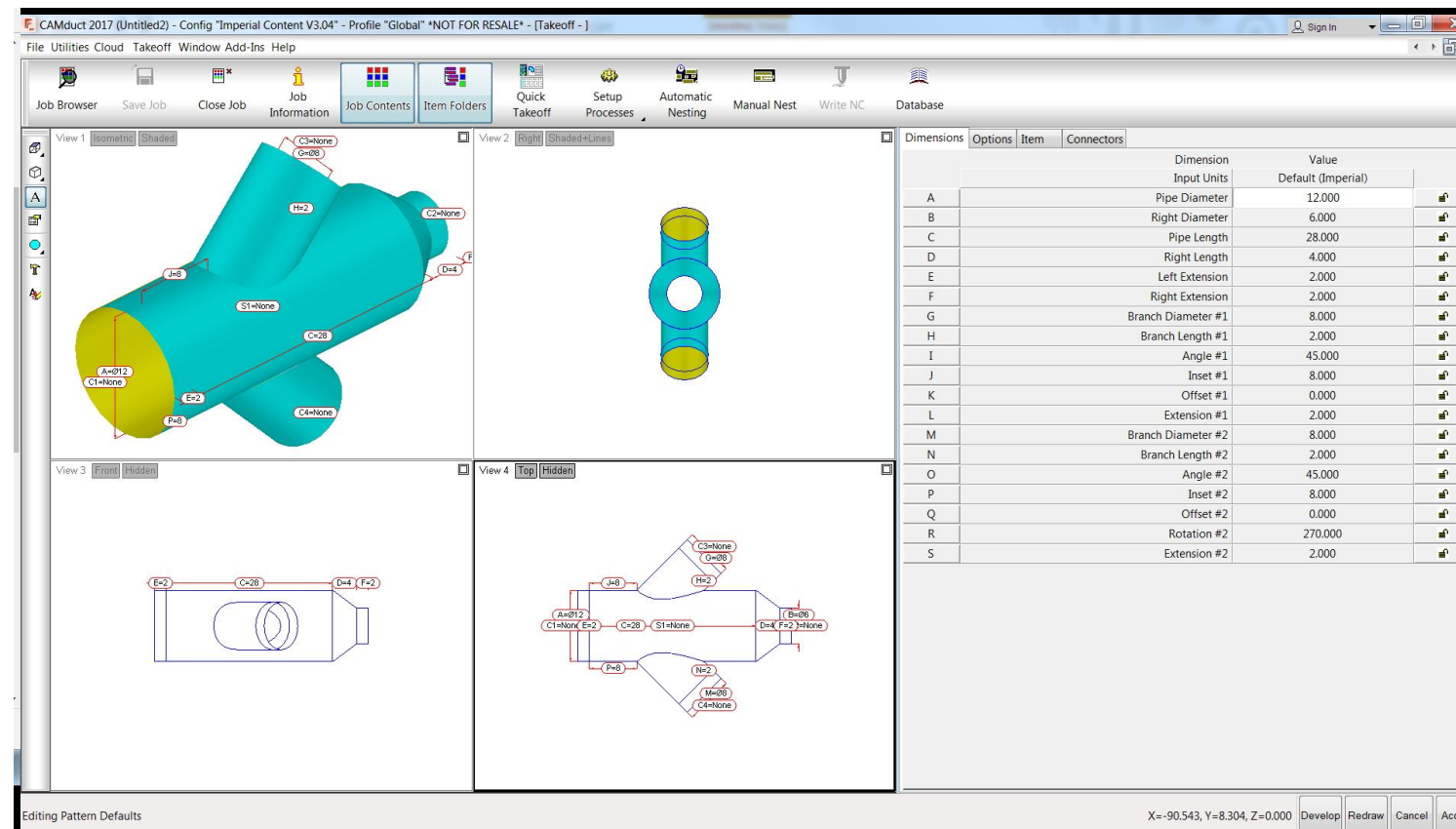
- Manufacturer : Elkhart Products Corporation
- Reducing Tee : 111R (WROT)





# Content Creation

- Use Pattern template : CID 2160

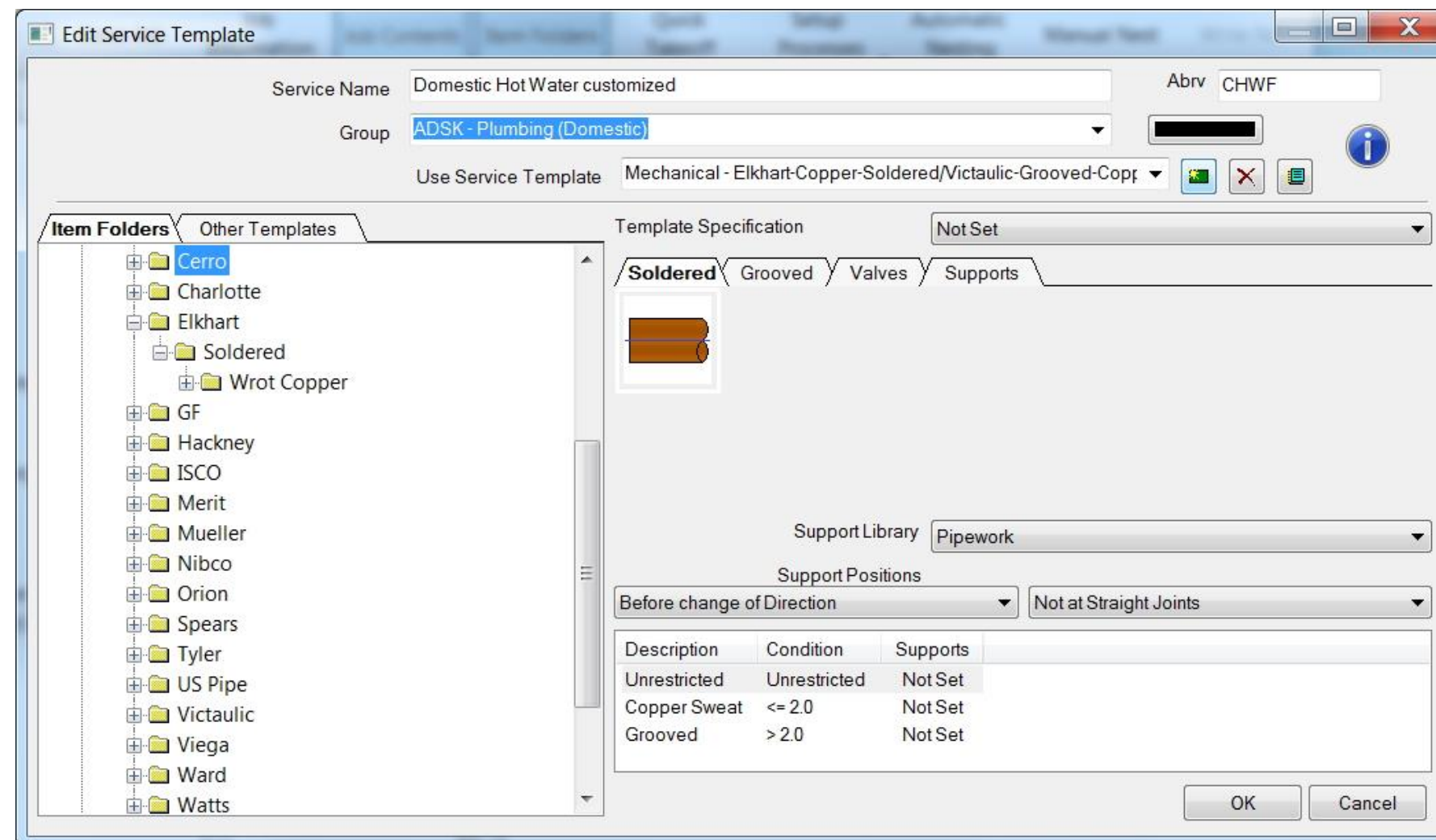


- Use existing material : Copper (adks data V11) & ASTM B88 (Elkhart)
- Use existing Specification : General Piping
- Use existing connector : ELK\_C-WCU



# Manage Content : New Service

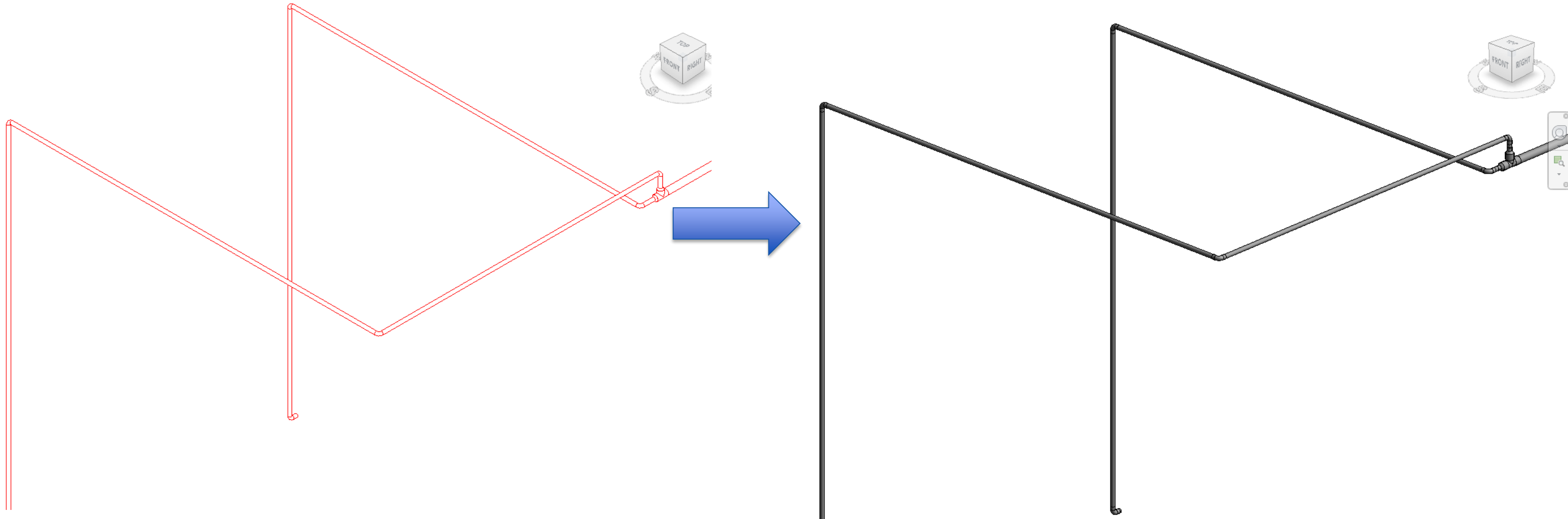
- New based on « Hot water flow »
- New service template based on « Mechanical – Nibco Copper – Soldered »



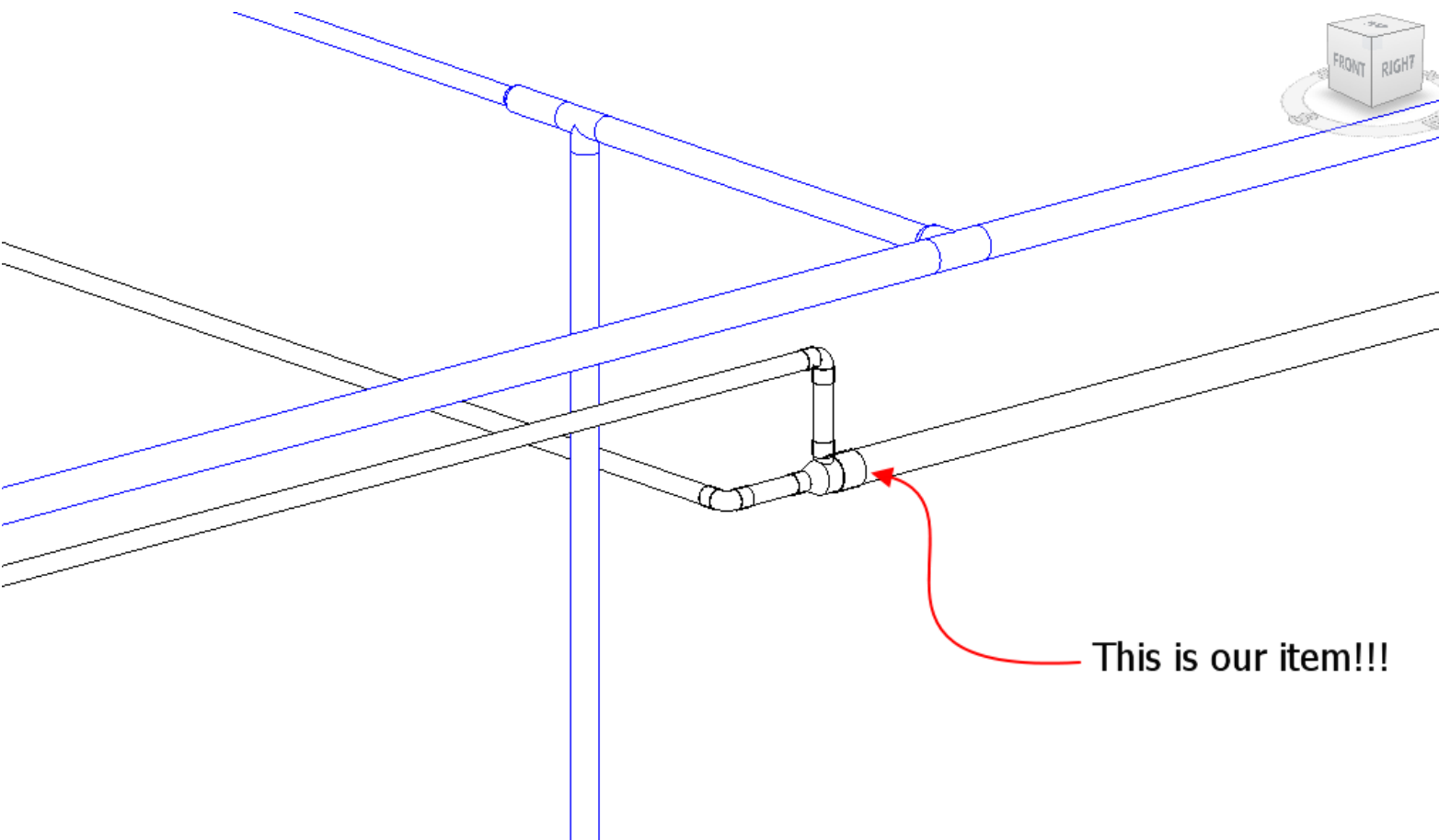
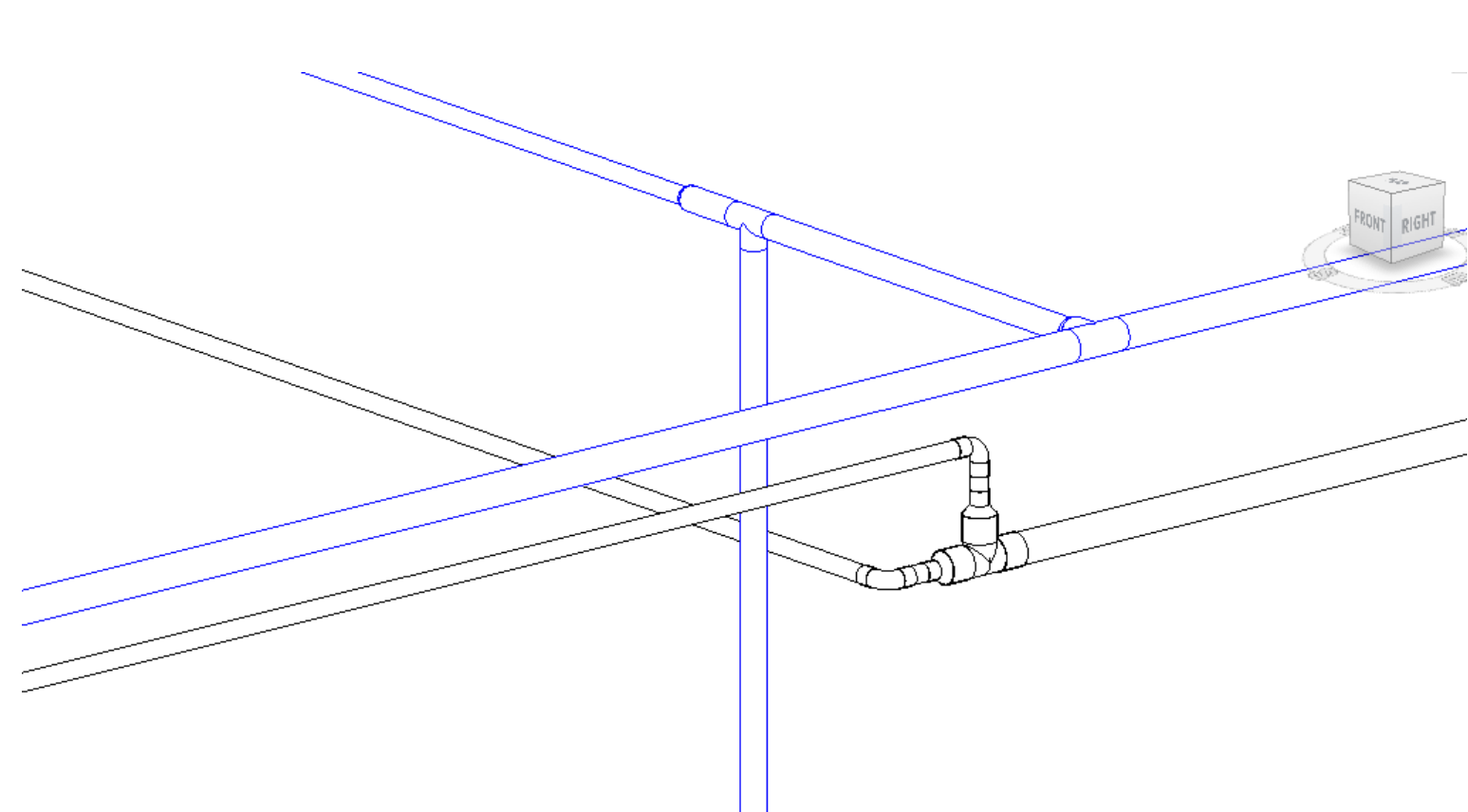
# Detailing Features in Revit



# Conversion in Revit



# Optimization



This is our item!!!

Estimating Summary

Group Summary | Pages | Fixed Costs | Distribute Costs | Review Item Costs | Review Installation Times | Review Fabrication Times

Estimating | All Categories | Section | All Sections

| Group    | Mat      | M-Over | Fab  | Install  | Extn     | Mark Up | Total    | %ge  |
|----------|----------|--------|------|----------|----------|---------|----------|------|
| Harrison | 2,186.88 | 0%     | 0.00 | 1,215.33 | 3,402.22 | 0.00    | 3,402.22 | 100% |

Fabrication Time: 0:00 (hrs) @ 0.00 \$(/hrs)      Installation Time: 40:31 (hrs) @ 30.00 \$(/hrs)

Totals

| Category     | Mat      | Fab  | Install  | Extn     | Mark Up | Total    | %ge  |
|--------------|----------|------|----------|----------|---------|----------|------|
| Manufactured | 0.00     | 0.00 | 0.00     | 0.00     | 0.00    | 0.00     | 0%   |
| Bought Out   | 2,186.88 | 0.00 | 1,215.33 | 3,402.22 | 0.00    | 3,402.22 | 100% |
| Fixed Cost   | 0.00     | 0.00 | 0.00     | 0.00     | 0.00    | 0.00     | 0%   |

OK Cancel

Estimating Summary

Group Summary | Pages | Fixed Costs | Distribute Costs | Review Item Costs | Review Installation Times | Review Fabrication Times

Estimating | All Categories | Section | All Sections

| Group    | Mat      | M-Over | Fab  | Install | Extn     | Mark Up | Total    | %ge |
|----------|----------|--------|------|---------|----------|---------|----------|-----|
| Elkhart  | 85.98    | 0%     | 0.00 | 0.00    | 85.98    | 0.00    | 85.98    | 3%  |
| Harrison | 1,766.44 | 0%     | 0.00 | 944.76  | 2,711.20 | 0.00    | 2,711.20 | 97% |

Fabrication Time: 0:00 (hrs) @ 0.00 \$(/hrs)      Installation Time: 31:30 (hrs) @ 30.00 \$(/hrs)

Totals

| Category     | Mat      | Fab  | Install | Extn     | Mark Up | Total    | %ge  |
|--------------|----------|------|---------|----------|---------|----------|------|
| Manufactured | 0.00     | 0.00 | 0.00    | 0.00     | 0.00    | 0.00     | 0%   |
| Bought Out   | 1,852.42 | 0.00 | 944.76  | 2,797.18 | 0.00    | 2,797.18 | 100% |
| Fixed Cost   | 0.00     | 0.00 | 0.00    | 0.00     | 0.00    | 0.00     | 0%   |

OK Cancel



# Conclusion

- After this class, you know :
  - How to create a new item
  - How to create a new service
  - How to use it in a Revit Project
  - Why it is interesting to work with this workflow;
- Now you have the information to customize the MEP fabrication database and get the profit from its use in the Revit environment.



# Q&A



