

**APIS User Meeting 2017**

# **Tips & Tricks from APIS Support**



# FMEA Form – Folding operations

FMEA Forms Editor QS-9000 (3rd edition): Assembly cable to plug (CC 2042 - manufacture signal cable [Process])

Function	Potential failure	Potential effect(s) of failure	S	C	Potential cause(s) of failure	O	Current preventive action	Current detection action	D	RPN	Recommended action
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F M E A  
Process

Item: CC 2042 - manufacture signal cable  
 Model year(s)/vehicle(s): Assembly cable to plug  
 Team:

Process responsibility:  
 Completion date:

Prepared by:  
 Created:

Function	Potential failure	Potential effect(s) of failure	S	C	Potential cause(s) of failure	O	Current preventive action	Current detection action	D	RPN	Recommended action
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<b>Process element: Prepare workplace</b>											
<b>Process element: Insert plug into soldering appliance</b>											
<b>Process element: <input checked="" type="checkbox"/> Solder cable strands on plug pins (manually)</b>											
<b>Process element: Solder shielding on plug housing (one sided; manually)</b>											
<b>Process element: Put cable into strain-relief</b>											
<b>Process element: Test cable using cable test appliance</b>											
<b>Process element: Attach proof-of-testing label to cable and put cable into transport bin</b>											
<b>Process element: Corrective soldering of faulty parts</b>											



# FMEA Form – Folding operations

- Reason for using: Better overview and easier to edit the form sheet
- Easy to recognize with green diagonal stripes
- Folding/unfolding of complete levels (e.g. functions/characteristics) is possible
- To activate go to the menu bar “View | Folding operations”
- Recommended when working with large forms: Fold either the level “system element” or “function/characteristic”
- The fold/unfold state is saved when the .fme is saved

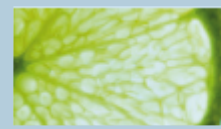


# FMEA Form – folding levels with filter

Example of filtering down to level “function/characteristic”:

Filter...

- System element by...**
  - OR
    - has Function with...
      - Name **contains** \*
    - has Characteristic/Requirements with...
      - Name **contains** \*
- Function by...**
  - Name **contains** \*
- Characteristic/Requirements by...**
  - Name **contains** \*
- Failure mode by...**
  - Name **contains** \*



# FMEA Form – combining folding operations/filter

## Set level filter as default:

A screenshot of a software dialog box. It contains two checkboxes: the first is checked and labeled 'Default filter for opening fme files:', and the second is unchecked and labeled 'Start Wizard to create new filters...'. On the right side, there are three buttons: 'OK', 'Cancel', and 'Help'.

## Activate filter to desired level

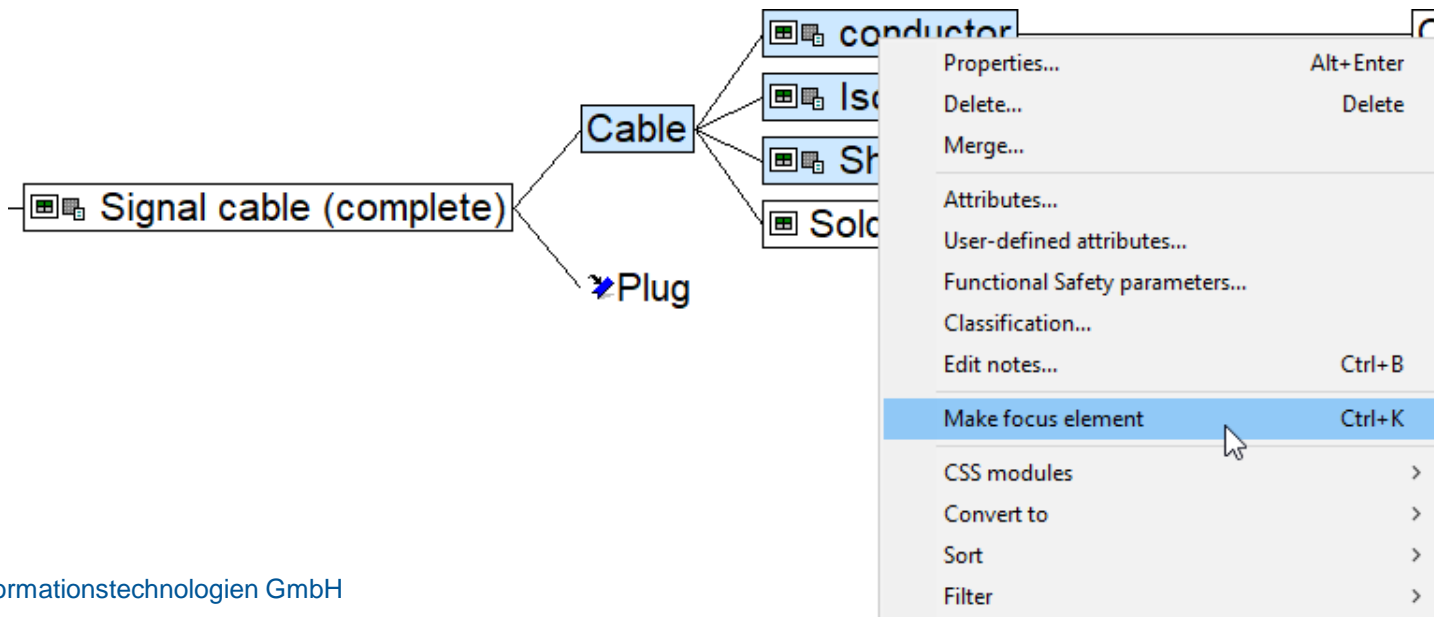
## Deactivate filter simply using F6

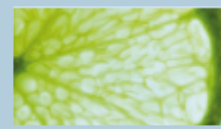
## Unfold only the area you want to work with



# "Make focus element" in Structure Editor

- ❑ New feature since Version 6.5 - 0140
- ❑ Works the same way as in the Net Editors
- ❑ Possible to select multiple elements
- ❑ Can be invoked using the context menu & keyboard shortcut "Ctrl + K"





# Removing elements from Function Net

- Feature in IQ Explorer: “Remove from all nets...”

Search in document in C:\Users\daadam10\Desktop\0150-R\Data\DE\EXAMPLE.fme.

Search Options Search in document Search in files Search on server

Search patterns (separate alternatives with |)

Functions English Find Find next Define search f

Search in current IQ document (C:\...\Data\DE\EXAMPLE.fme)  Search in the result list

File search (C:\...\daadam10\Downloads )  Search in the CARM Server (CARM Server service: CSS Action Tracking)

Result	File name	Structure/variant
transport signals from sensor to control up	Call... BLE f	CC 2042 - system
is a mechanical interface betw		CC 2042 - system
clamp wires to contact pin v		Plug - constructive design
required mesh density {1}		CC 2042 - signal cable constructive...
has specified mechanical st		CC 2042 - signal cable constructive...
monitor amount of solder and s		CC 2042 - manufacture signal cable
safeguard processor input fro		CC 2042 - system
enable emergency shutoff in c		CC 2042 - signal cable constructive...
transmit signal with specified r		CC 2042 - system
core material contact pin {1}		Plug - constructive design
amplification of output signal e		CC 2042 - system
mechanically fixates cabel,		Plug - constructive design
solderability of shielding {1}		CC 2042 - signal cable constructive...
transmit signal with specified r		CC 2042 - manufacture signal cable
creates a signal commensurat		CC 2042 - system
material of plug body {1}		Plug - constructive design
puts plug into soldering appliar		CC 2042 - manufacture signal cable

Information table >

Remove search results... Shift+Delete

Properties... Alt+Enter

Info...

Delete... Delete

**Remove from all nets...**

Add to variant

Remove from variant

Convert to >

Results list forward Ctrl+Right

Go to object

Open user-defined view >

Result list as auto-filter for >

Display options...

Define a search filter... Shift+Insert



# Summary Functions: Status report of actions

## Example:

Ratio of completed actions in comparison to all\* actions

(\* = all actions that haven't been rejected)

- Invoke this functionality using the context menu: “Templates | Placeholder...”
- This can be done from Note (Ctrl + B | context menu → Edit notes...)
- Or from Personal Information Manager PIM
- More information can be found at <https://www.apis-iq.com/sl/iqr>







# Summary Functions: Progress template

- ❑ Reason for using: To protocol a status report for a target/set date
- ❑ Requirements: Report is already saved as a template
- ❑ This feature can be utilized from the context menu in the PIM (left side)
- ❑ “New | Add report | Individual Quality Report (IQR) from template (cfg)”

## Result:

Personal Information Manager (PIM):

Public Private FMX bookmark file Percent: 74.36 %

- FUSI
  - [-] System elements
  - [-] System elements
  - DRBFM II
  - [-] IQ Reports
    - [-] 13-Oct-17: Supervisor
      - [-] IQ-Quality - Status report 13-Oct-17 2:02:50 PM: Completed Actions



# FMEA Files in a network

If the network connection is unstable or even breaks when working on an FMEA, this can lead to the file being corrupted.

To prevent this:

- ❑ Work on a local copy (can be cumbersome, but is safer)
- ❑ Workstation setting: “Create a temporary working copy of the opened file”

