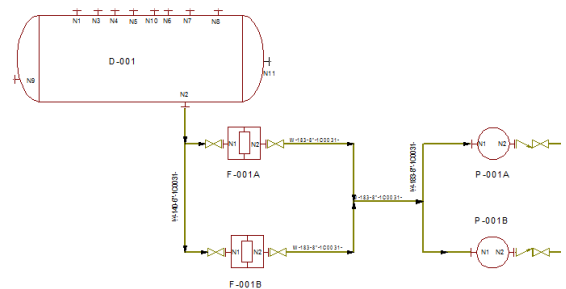# QualityAssuranceModule
Use Case 1: Check syntax of SmartPlant P&ID equipment tags

CHALLENGE

It is always a challenge to keep track if all tags apply to the naming convention which is mandatory for the project; users can make mistakes when they key in the different attributes the tags are made of.

WORKFLOW STEPS

1. Extract source data from SmartPlant P&ID using **PID ReportAdapter**

2. View data in the **QualityAssuranceModule** and apply the rule to check the tags
   Tag rule: "Tag must start with a character; plus the TagSequenceNumber must be numeric and 3 digits long, for the last digit 0 is not allowed"

Drawing Name	Item Tag	Tag Prefix	Tag Seq No	Tag Suffix	Equip Class
▶ Po Wa	-168		168		Heat Transfer Equipment
Po Wa	F-001A	F	001	A	Mechanical Equipment
Po Wa	F-001B	F	001	B	Mechanical Equipment
Po Wa	P-001B	P	001	B	Mechanical Equipment
Po Wa	P-001A	P	001A		Mechanical Equipment
Po Wa	D-001	D	00	1	Vessel Equipment

Or 〰 ⊕
⎯⎯ [Item Tag] Is not like [A-Z]% ✎ ⊗
⎯⎯ [Tag Seq No] Is not like [0-9][0-9][1-9] ✎ ⊗

3. Create Excel report from the **QualityAssuranceModule**

	A	B	C	D	E	F
1	Drawing Name	ItemTag	Tag Prefix	Tag Sequence No	Tag Suffix	Equipment Class
2	Po Wa	-168		168		Heat Transfer Equipme
3	Po Wa	F-001A	F	001	A	Mechanical Equipment
4	Po Wa	F-001B	F	001	B	Mechanical Equipment
5	Po Wa	P-001B	P	001	B	Mechanical Equipment
6	Po Wa	P-001A	P	001A		Mechanical Equipment
7	Po Wa	D-001	D	00	1	Vessel Equipment

SOLUTION

- The **QualityAssuranceModule** makes it easy to identify the tags which are not compliant with the naming convention; these tags can be exported to an Excel report
- This type of report can be handed out to the contractors (or to other inhouse departments) with the goal to have the data reworked so that it complies with the rules

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