PMIM & Scenario Driven Design

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Overcoming the size and repetition of information in the current model of TPs, this proposal allows for a minimized structure and enable a full scenario based design approach for TPs.

# Current Scenario

The current PMIM solution aims to model and track all the elements that went into designing a TP. Currently there are 5 items considered within the PMIM model structure:

1. Node model/ s
2. TP model/ s
3. Interface model/s
4. Universe models/s
5. Mechanics

Describing a solution using the PMIM structure allows us to track what elements make up that solution and track changes to these elements. For example, the ERBS solution is made up of multiple node versions, a DC and a DIM TP, multiple interfaces, a single universe and the mechanics configuration used to design the solution. This structure allows for a lot of repetition of information in the multiple Node and TP models. This repetition results in larger models which take time to load, manipulate and ultimately support.

# Proposed Approach

The current PMIM approach is that there would be multiple node models, each describing a revision of a node where the TP then describes how all the various revision would be structured on tables. This causes huge amounts of repetition in the models as each of them describe the same thing.

The thinking behind scenario driven design is the ability to identify scenarios from the node input that impact the TP in some way. An example of this can be described when a node adds a new MO to the model. This newly added MO will have an impact to the TP as a new table is required to support it. The ability to determine this scenario then allows us to automate the steps to take upon finding the scenario. In this case, converting the MO into a new table in the TP and adding the counters from the MO as columns on the TP table.

The scenario driven approach then allows us, in some cases, to fully automate the new node version integration into the TP producing a complete TP model ready for creating the deliverable TPI. The new TP model can be taken by TP AF today and a TPI can be created against any ENIQ version automatically. The scenario driven approach together with the features of TP AF demonstrate that we do not need to model the table structure in the TP.

Using the scenario driven approach and modelling a single node instance where a new node model revision merely updates the available information, there would be no need to model the table structure of the TP. This removes the repetition of information across the model as there would be only 1 node version and the data would not repeat into the TP. The approach then isolates any human interaction required to support the solution to be added to the TP and everything else available from the node can be automated.