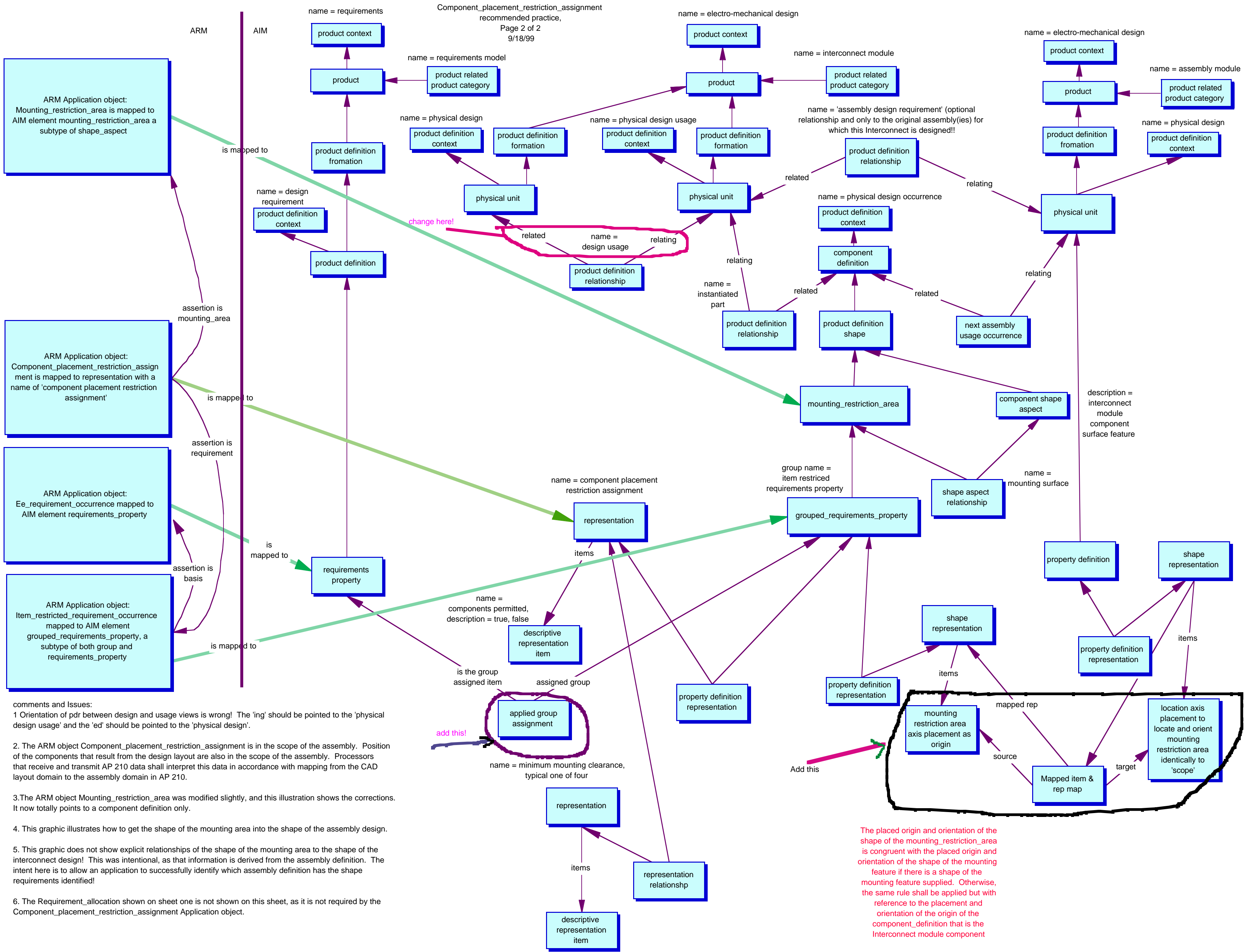


In the assembly, restrictions are defined for where components may be placed. Since there may be many instances of interconnect, but only a few places where the original requirements are identified, an explicit relationship must be available. This explicit relationship is defined in the mapping of the assembly context of AP 210 to the layout context applicable to layout tools. There is no intent of AP 210 to duplicate the information in the assembly context in the layout context and vice versa. It is expected that pre and post processors will do this mapping as needed.

A recommendation is to use the ARM attribute `Interconnect_module.assembly_design_requirement` to establish the fact that a specific assembly definition establishes design requirements for an interconnect. This ARM attribute is available in version 40 of ARM.

This illustration collapses some of the ARM relationships by leaving out intermediate Application objects and uses generic terms for the relationships.

The axis placements that determine the orientation and location of the shape of the restriction and the shape of the mounting surface are congruent. This implements the required causal relationship between the shape of the mounting surface and that of the restriction area, since the ARM does not explicitly model the relevant shape representation relationship. Having located the restriction shape in model space using this mechanism, that shape may be used as a shape based requirement in the design of the interconnect without needing to explicitly include it in the definition of the interconnect in the standard. Most CAD packages will import that shape into the internal layer structure in the layout tool.



- comments and Issues:
- 1 Orientation of pdr between design and usage views is wrong! The 'ing' should be pointed to the 'physical design usage' and the 'ed' should be pointed to the 'physical design'.
 2. The ARM object Component_placement_restriction_assignment is in the scope of the assembly. Position of the components that result from the design layout are also in the scope of the assembly. Processors that receive and transmit AP 210 data shall interpret this data in accordance with mapping from the CAD layout domain to the assembly domain in AP 210.
 3. The ARM object Mounting_restriction_area was modified slightly, and this illustration shows the corrections. It now totally points to a component definition only.
 4. This graphic illustrates how to get the shape of the mounting area into the shape of the assembly design.
 5. This graphic does not show explicit relationships of the shape of the mounting area to the shape of the interconnect design! This was intentional, as that information is derived from the assembly definition. The intent here is to allow an application to successfully identify which assembly definition has the shape requirements identified!
 6. The Requirement_allocation shown on sheet one is not shown on this sheet, as it is not required by the Component_placement_restriction_assignment Application object.

The placed origin and orientation of the shape of the mounting_restriction_area is congruent with the placed origin and orientation of the shape of the mounting feature if there is a shape of the mounting feature supplied. Otherwise, the same rule shall be applied but with reference to the placement and orientation of the origin of the component_definition that is the Interconnect module component