Updates

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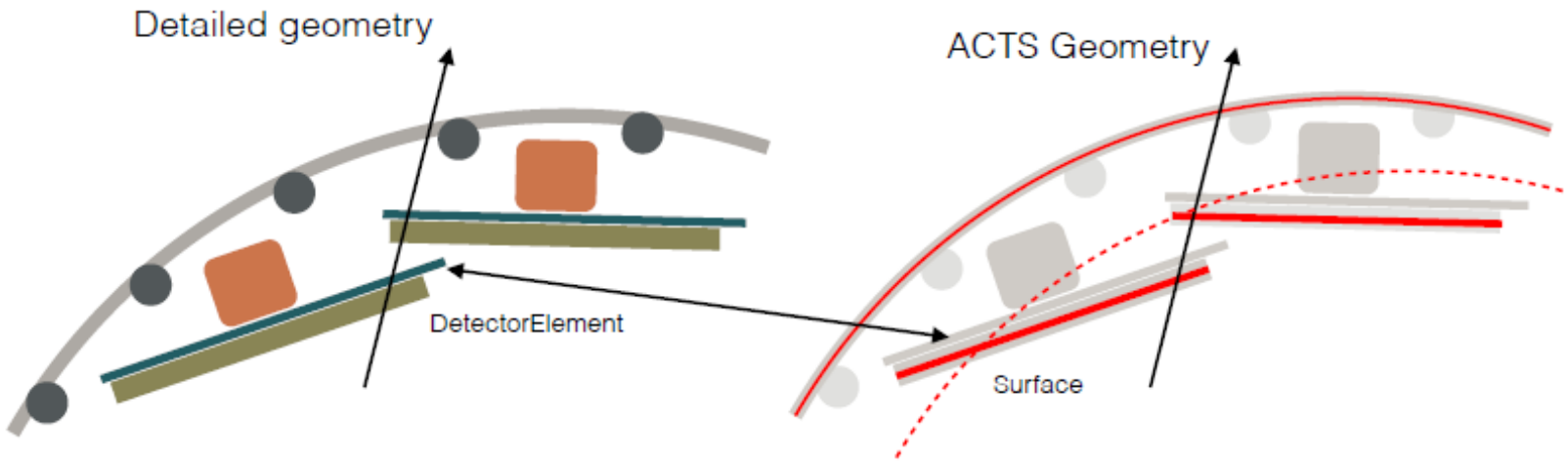
Converting Geometry to ACTS Geometry

ACTS Geometry

- Only detector elements are directly translated
- Requirements to the shape using in DD4HEP



- How: By adding the ActsExtension into the detector constructor function.
  - Barrel, endcap, beampipe, layer
  - Axes
  - etc

convertDD4hepDetector

Converting:

1. Gathering all the sub-detectors
    1. Get the sub-detectors of the world detector
    2. Go through the detector hierarchies
    3. Sort the sub-detectors from bottom to top
2. Create and assign surfaces
    1. Looping all of the grouped sub-detectors and get their shape and config (barrel, endcap, ...)
    2. Create inner surface, outer surface and central surface for each Detelement
        - For sensitive part: creatSensitiveSurface: DetElement->TGeoDetectorElement->surface()
            - Bounds: Box, trapezoid,tube(Disc, cylinder) surface

Lots of details during the converting not mentions and still to be understood.

Requirement to DD4Hep:

- Tube/TGoTubeseg and box/TGeoBBox shape only(?)