**Support for 'Virtual Site Entities (VSite)'** There is a requirement to group existing Service Endpoints (currently grouped under their corresponding 'owning' physical Site) under a new 'Virtual Site' entity. See: https://rt.egi.eu/rt/Ticket/Display.html?id=987 and https://wiki.egi.eu/wiki/Logical-site

At present, the proposed features of a VSite will include:

1. A VSite will be a separate GOCDB entity, and will have users and other attributes much like an existing physical site but with different rules as described below.
2. A VSite will be used to group existing Service Endpoints only (i.e. SEs that have already been created under their owning physical Site).
3. A VSite cannot group new SEs that have no owning physical site.
4. A single SE may only have a single parent physical Site (i.e. GOCDB cardinality of 1 between Site and SE)
5. A single SE can have many parent VSites (requires GOCDB cardinality of 'many-to-many' between Virtual Site and SE).
6. New PI queries are proposed to support querying of VSites and querying of SEs that are grouped under a VSite (much like the existing get_site and get_service_endpoint methods (https://wiki.egi.eu/wiki/GOCDB/PI/get_service_endpoint_method and https://wiki.egi.eu/wiki/GOCDB/PI/get_site_method). The following XML example is related: https://twiki.cern.ch/twiki/pub/Main/ATPVOFeeds/atp_vo_feed_example.xml
7. The permissions model of a VSite is not yet well defined. It is currently proposed that users with a role over the owning physical site should maintain their cascading permissions over their SEs (i.e. no modification to the current site/permissions model), however, users with a role over the VSite will not have any cascading permissions over the SEs. Consequently, this has the following important implications;
   • A VSite could not be used to declare a downtime for all its member SEs.
   • Similarly, users with a role over the VS will not be able to update/modify a member SE.
8. If VSite permissions are required (e.g. for declaring SE downtimes and modifying SEs), then a user may have to request a new role under the physical site or be granted a corresponding permission. These requirements are currently undefined.

Virtual Sites Proposal
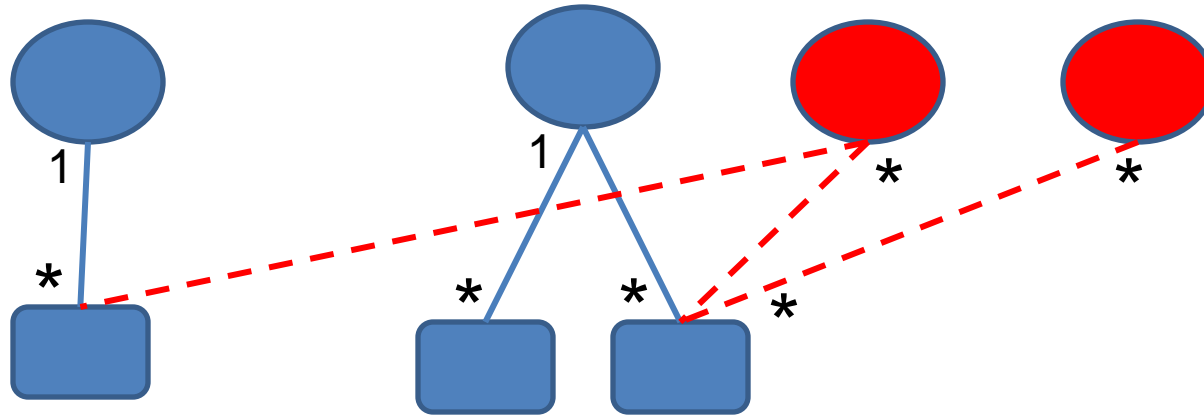
Service Endpoint (SE)

Virtual Site (no permissions over SEs). Cardinality of many-to-many with SE.

Physical Site (has permissions over SEs). Cardinality of 1-to-many with SE.