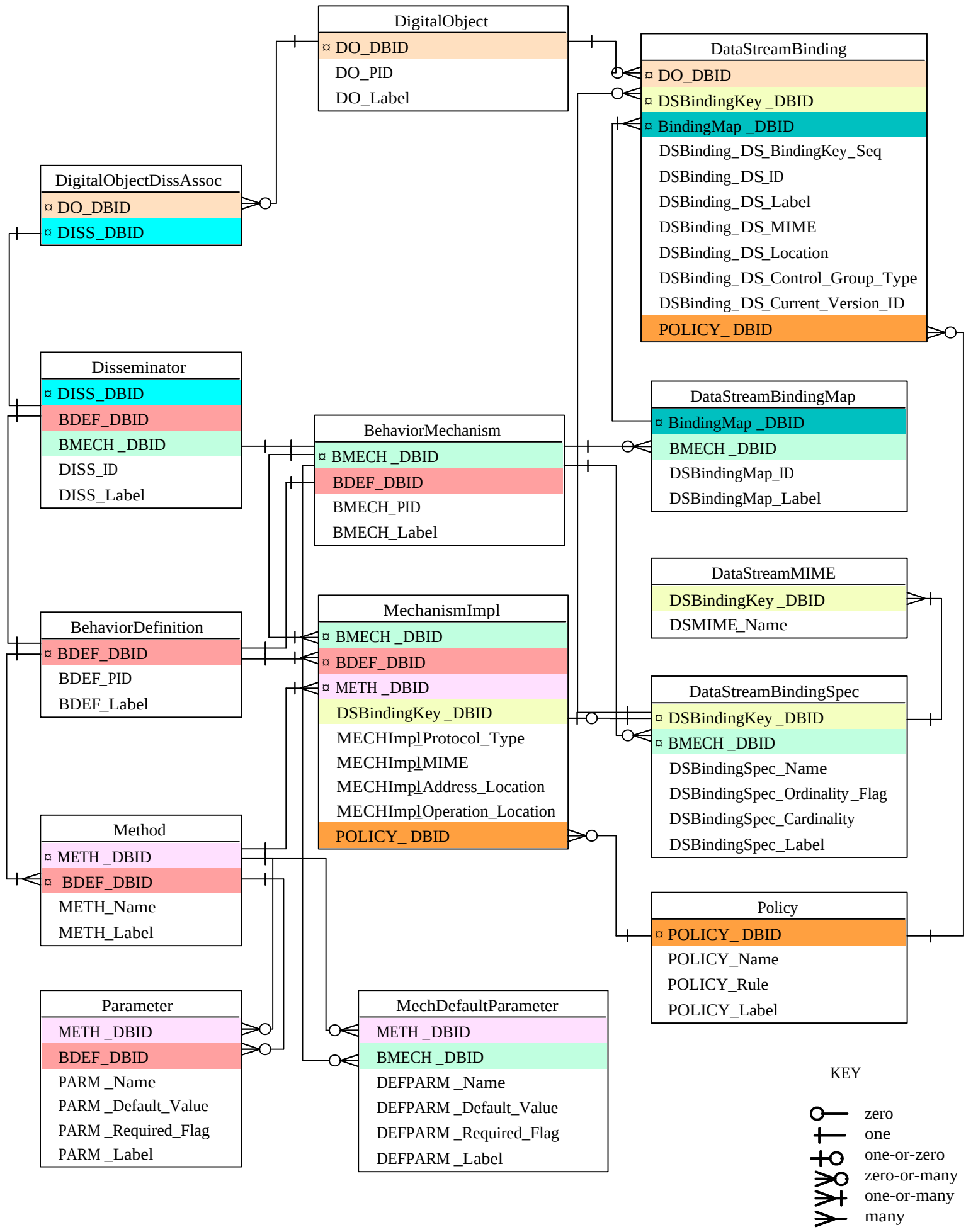
# FEDORA Relational Database Schema




Notable Relationships:

1. A digital object has ZERO, ONE, or MANY Disseminators.

2. A digital object has ONE or MANY BindingMaps (equivalent to StructureMaps in METS).

2. A BindingMap conforms to ONE or MANY BehaviorMechanism (e.g., the UVA Simple Image Mechanism).

3. A BehaviorMechanism provides a namespace that defines ONE or MANY DSBindingKeys.

4. A BehaviorMechanism supports ONE BindingMap (deals with data of a particular structural form).

5. MANY different BehaviorMechanisms can be written to support a particular BindingMap.

6. A BehaviorMechanism implements ONE BehaviorDefinition.

7. A MechanismImplementation can execute ONE or MANY methods defined by a BehaviorDefinition.

8. A MechanismImplementation associates a method with data labeled by a distinct DSBindingKey.

9. A Disseminator specifies a particular BehaviorDefinition and BehaviorMechanism combination.

10. A MechanismImplementation is related to a digital object via common DSBindingKeys that exist both in the BehaviorMechanism and the digital object StructMap. The Servlet can have ONE or MANY common DSBindingKeys (scoped within a BindingMap) with a digital object.

The running of Disseminations can be achieved by:

1. Hit digital object table with DO_DBID (resolved by DO_PID from dissemination request).

2. Get Disseminators for DO_DBID.

3. Get appropriate Disseminator with BDEF_DBID (BDEF_PID from dissemination request).

4. Get BehaviorMechanism with BMECH_DBID from Disseminator.

5. Get BehaviorDefinition with BDEF_DBID.

6. Get METHOD_DBID in Method table (via BehaviorDefinition) using Method_Name (Method_Name from dissemination request).

7. Get method implementation record in MechanismImplwith METHOD_DBID.

8. Get DSBindingKey_DBID from method implementation record of MechanismImpl.

9. Get one or more Datastream Locations from DigitalObjectBindingMap with DSBindingKey_DBID from method implementation record.

10. If the method supports Method Parameters or the Mechanism supports Default Method Parameter, this information can be retrieved from the Parameter and MechDefaultParameter tables using METH_DBID, BDEF_DBID, and BMECH_DBID.

At this point, the database will have provided all the information necessary for repository software to process a dissemination request.