# Entity Relationship Modelling the Identities of Things

Scott Shorter 2014-08-07

# Scott's "Venn" Diagram

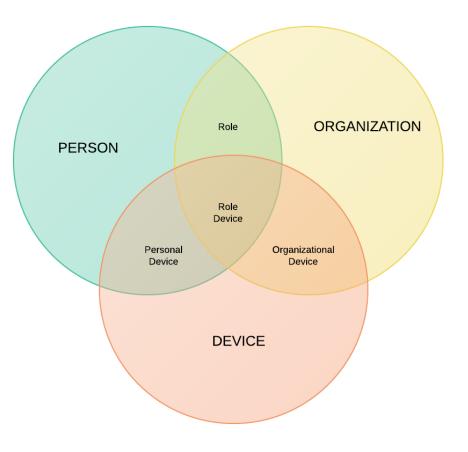
Inspired by Sal D'Agostino's June 2014 contribution to WG-UMA Sent to WG-UMA and to DG-IDOT in July 2014.

Not actually a Venn diagram – otherwise a "Personal Device" would be both a Person and a Device.

The circles reflect entity types: PERSON, ORGANIZATION (ORG) and DEVICE.

Intersection regions represent *relationships* between entities – a ROLE is a relationship between the PERSON filling the role and the ORG.

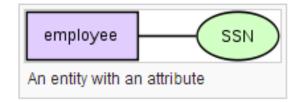
Given that we're describing entities and relationships, let's try **entity relationship modeling** instead.



# **Entity Relationship Models**

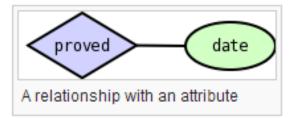
Entity Relationship Models are used business process engineering and software engineering. These examples give the basic syntax used in this presentation.





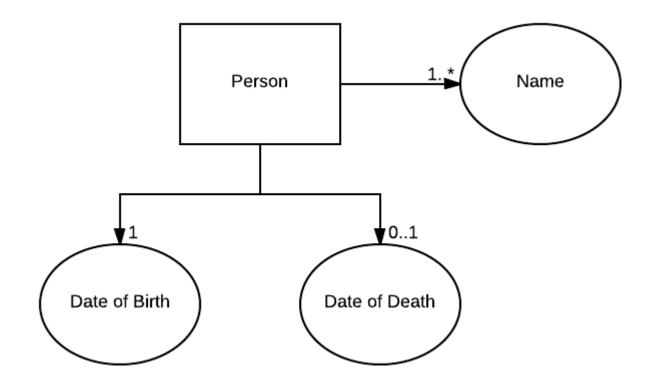
#### Source:

http://en.wikipedia.org/wiki/Entity%E2%80%93relationship\_model

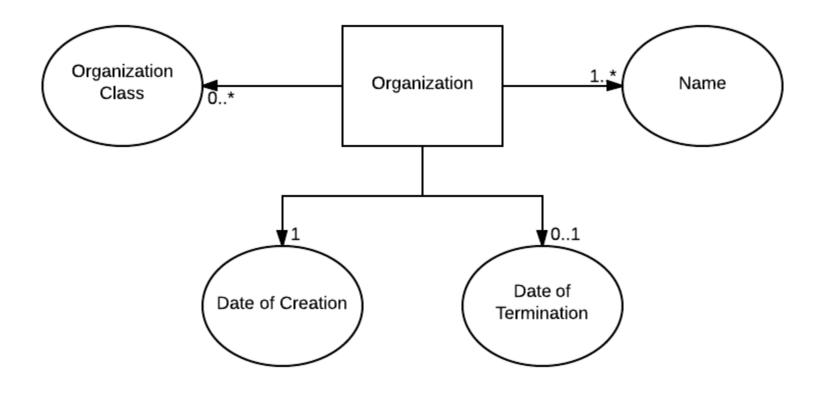




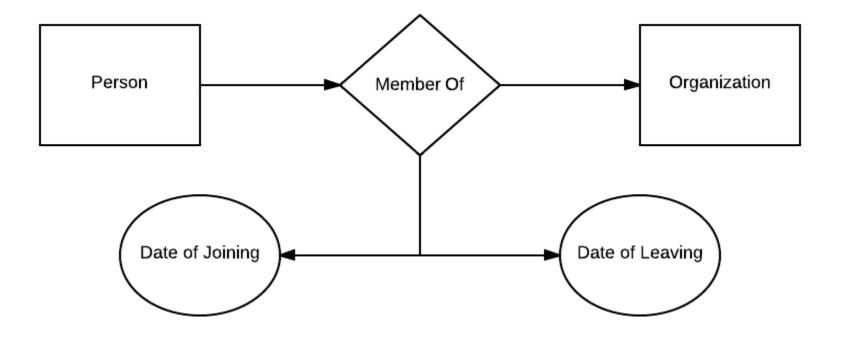
#### Person



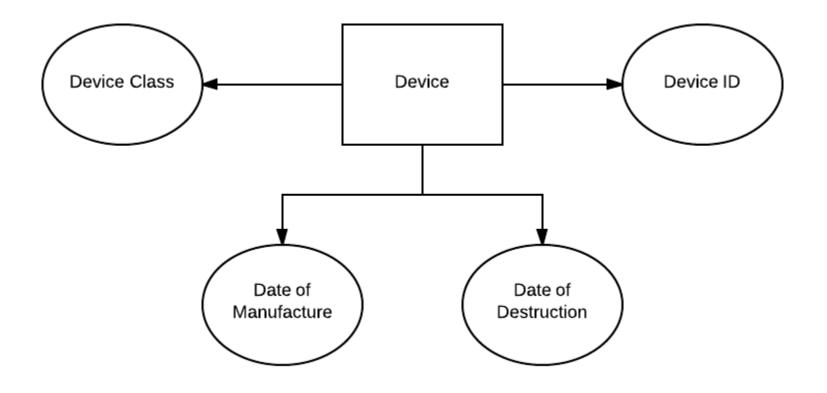
## Organization



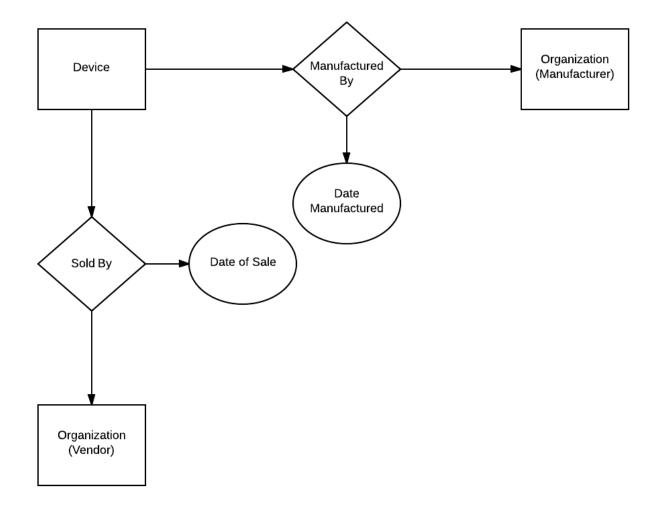
#### **Organization Membership Relationship**



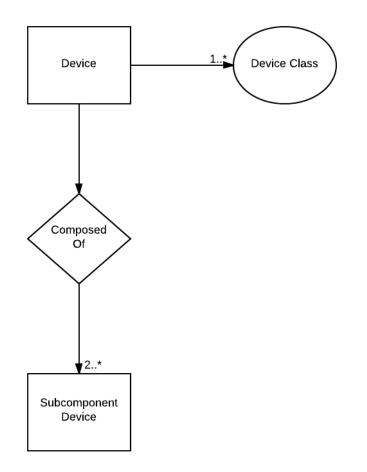
## Device



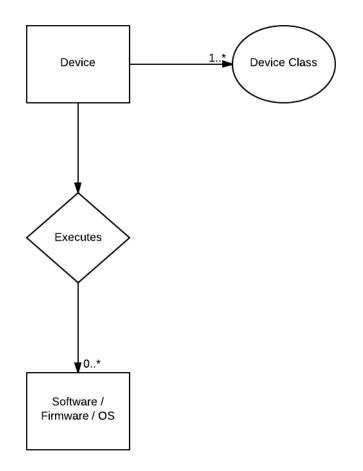
## **Device Manufacture and Sale**



### **Device Decomposition**



### **Device Software Execution**



# **Device Ownership**

