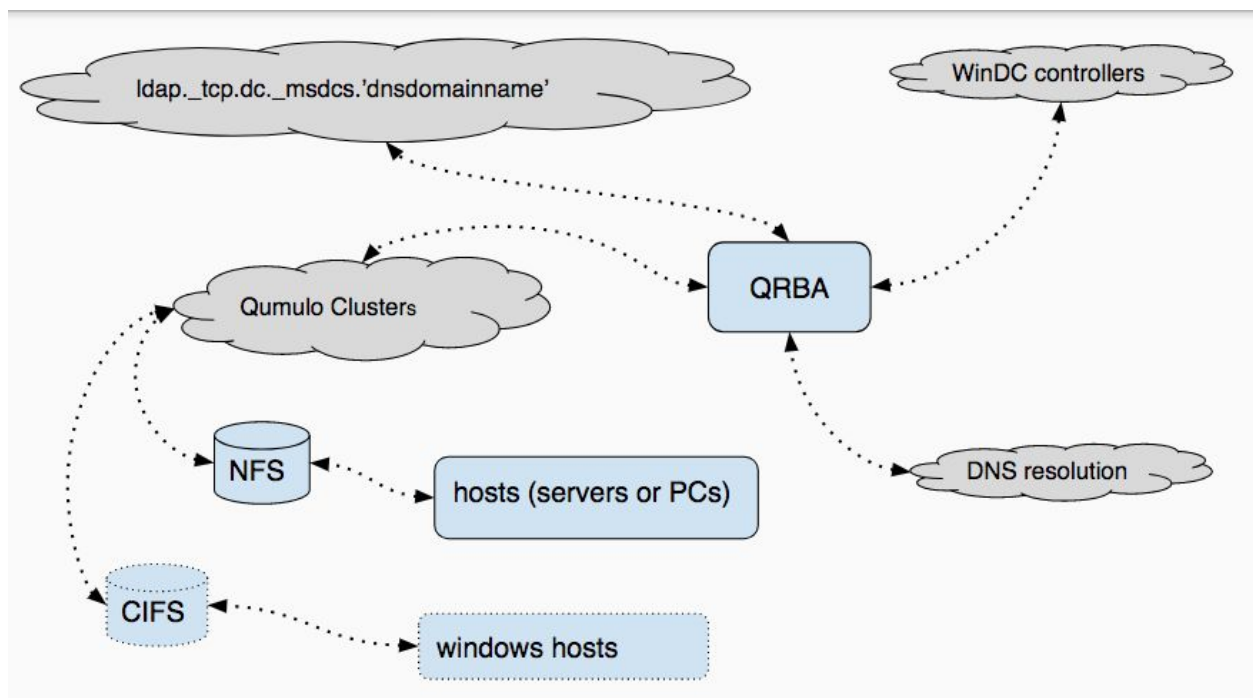# QRBA Overview

v1.0

31 May 2018

QRBA (Qumulo Role Based Administration) allows system administrators to create and remove NFS exports on a Qumulo storage system.

Viewed from a 'high level' QRBA interacts with components of an organization's infrastructure like this.

At finer detail QRBA is implemented with several types of objects. They range from external services to those managed by a system administrator. These are designated by colors in the object relationship shown below.   This user guide focuses on those objects that are managed by a system administrator; those items shown in blue.

QRBA Object Relationships
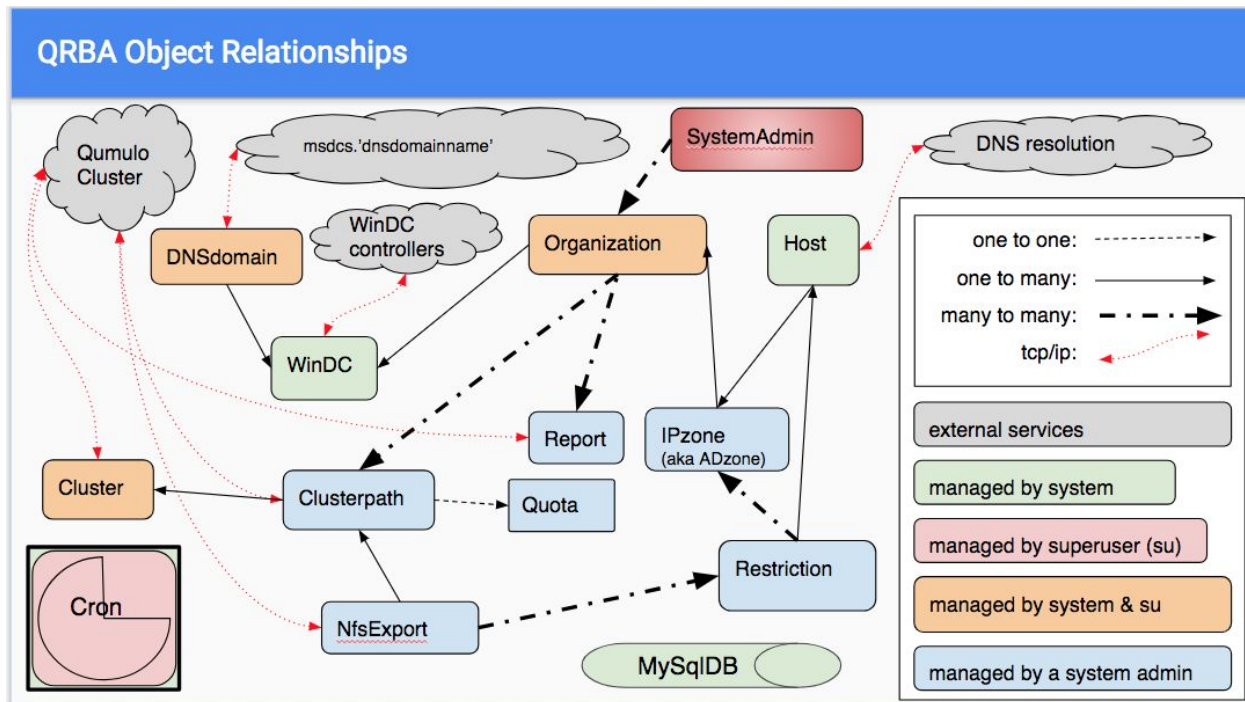
A physical Qumulo Cluster (grey) is represented by a Cluster object (orange). Clusterpath objects represent a file path on a Cluster and each Clusterpath has zero or more associated Quota object(s); zero meaning no quota will be enforced. Clusterpaths are owned by an Organization and managed by system admins. NFS exports have one or more Restriction objects associated with them and each Restriction is associated with one or more IPzones. IPzones contain lists of ipaddresses for the Host objects.

When installed QRBA interrogated the Windows Domain controllers assigned to the domain wx.noaa.gov and obtained list of Organizations which have ADzones that contain UNIX hosts. These Organizations and their hosts were added to the system. The associated ADzones were added as IPzone objects.

Each Organization is assigned a Clusterpath and its Quota places an upper limit on storage space available to it. Quotas are hierarchical and their sizes are ultimately limited by the minimum size of the ancestors.