Ganymede Forecasting

Introduction

This page presents information necessary for managing capacity of Ganymede.

24-hour View

Once Ganymede was in production for a full 24 hours, some stats were gathered.

- 2,091,559 objects
- Average object size: 1184.25 bytes
- Data size (space used to hold the data plus padding): 2,476,946,128 (2.4 GB)
- Storage size (space for all data objects (not indexes)): 3,027,578,880 bytes (3 GB)
- Index size (space required for indexes): 67,942,560 (67 MB)
- File size (Total disk space consumed by data files, includes preallocated space and padding factor): 4,226,809,856 (4 GB)
- Archived MySQL dumps take approximately 301 MB

Future Growth

To calculate future storage needs, we use the "File size" stat from the 24-hour View. The average object size is not expected to grow significantly in the foreseeable future given the emphasis on CaaS only maintaining enough data to interact with other services (ie. any add-on product such as BaaS, MaaS, EMaaS, ITaaS, etc. will maintain their own data and CaaS will only keep enough data so it can interact with it.)

In all cases, the base figures have 10% added then rounded up.

	30 days	60 days	90 days	120 days	365 days
Data Warehouse (MongoDB)	141,733,920,750 bytes	283,467,841,500 bytes	425,201,762,250 bytes	566,935,683,000 bytes	1,724,429,369,125 bytes
Data Archive (Cloud Files)	10,415,505,390 bytes	20,831,010,780 bytes	31,246,516,170 bytes	41,662,021,560 bytes	126,721,982,245 bytes