

MongoDB and S3 Data Model

Fields marked with * have individual DB indexes. (unique-compound fields may or may not have individual indexes.)

Features are now stored as zipped files on Amazon S3.

Bucket and file naming like so:
features<env>/datasetID.gzip

Images are stored on Amazon S3.

Bucket and file naming like so:
images<env>/filename.jpg

experiment.selection		
P	_id *	ObjectId
unique	name *	String
	enabled	boolean
not blank	account_id *	String
not blank	dataset_id *	String
not blank	gene_hits	List(String,int,int,int)
	type	String
	status	String
	obo_foundry_terms	Array(String)
	comment	String
	created_at	Timestamp
	last_modified	Timestamp
	enabled	boolean

admin.collectionmetadata		
P	_id *	ObjectId
unique	collection_name *	String
	since_model_version	String
	last_changed_model_version	String

analysis.dataset		
P	_id *	ObjectId
unique	name *	String
	enabled	boolean
not blank	image_alignment_id	String
not blank	tissue	String
not blank	species	String
	overall_feature_count	int
	unique_gene_count	int
	unique_barcode_count	int
	overall_hit_count	int
	overall_hit_quartiles	Array(Double)
	gene_pooled_hit_quartiles	Array(Double)
	obo_foundry_terms	Array(String)
	comment	String
	created_by_account_id	String
	gene_pooled_hit_quartiles	Array(Double)
	created_at	Timestamp
	last_modified	Type
transient	granted_accounts	Array(String)

analysis.imagealignment		
P	_id *	ObjectId
unique	name *	String
not blank	chip_id *	String
not blank	figure_red	String
not blank	figure_blue	String
not blank	alignment_matrix	Array(Double)
	created_at	Timestamp
	last_modified	Timestamp

analysis.chip		
P	_id *	ObjectId
unique	name *	String
	barcodes	int
	x1_total	int
	y1_total	int
	x1_border	int
	y1_border	int
	x1	int
	x2_total	int
	y2_total	int
	x2_border	int
	y2_border	int
	x2	int
	y2	int
	created_at	timestamp
	last_modified	timestamp

user.datasetinfo		
P	_id *	ObjectId
unique-comp	account_id *	String
unique-comp	dataset_id *	String
	comment	String

user.account		
P	_id *	ObjectId
unique	username *	String (email)
not blank	password	String
not blank	role	String
	enabled	boolean
	institution	String
	first_name	String
	last_name	String
	street_address	String
	city	String
	postcode	String
	country	String
	created_at	Timestamp
	last_modified	Timestamp
	enabled	boolean