

Duke Disk Space Usage

There are occasionally questions about how much disk space is used by Grouper in the various tables (e.g. primary tables vs user audit vs point in time audit). Here's Duke's usage using an Oracle database.

To get an idea of our size, here's are some counts of rows in a few tables:

grouper_attribute_assign - 84,599
grouper_memberships - 12,591,506
grouper_group_set - 6,593,297
grouper_groups - 504,764
grouper_members - 1,998,076
grouper_stems - 274,022
grouper_stem_set - 2,255,213

grouper_pit_attribute_assign - 177,782
grouper_pit_memberships - 21,352,983
grouper_pit_group_set - 12,506,323
grouper_pit_groups - 1,117,653
grouper_pit_members - 1,998,076
grouper_pit_stems - 676,182

The "pit" tables are for point in time audit. If you subtract the counts on the non-pit tables from the pit tables, those are the number of objects deleted in Grouper that are still in point in time. Note that all current objects need to be in point in time. So for example, I have 504,764 groups currently. The point in time audit has those plus an additional 612,889 that were deleted at some point.

grouper_audit_entry (user audit) - 21,612,122

Table disk space usage

This is the disk space used by each of the Grouper tables excluding indexes.

Table	Disk space (GB)
GROUPER_ATTRIBUTE_ASSIGN	.021484375
GROUPER_ATTRIBUTE_ASSIGN_VALUE	.0078125
GROUPER_ATTRIBUTE_DEF	.000061035
GROUPER_ATTRIBUTE_DEF_NAME	.00390625
GROUPER_ATTRIBUTE_DEF_NAME_SET	.001953125
GROUPER_ATTRIBUTE_DEF_SCOPE	.000061035
GROUPER_ATTR_ASSIGN_ACTION	.000061035
GROUPER_ATTR_ASSIGN_ACTION_SET	.000061035
GROUPER_AUDIT_ENTRY	13.7304688
GROUPER_AUDIT_TYPE	.000061035
GROUPER_CHANGE_LOG_CONSUMER	.000061035

GROUPER_CHANGE_LOG_ENTRY	1.44805908
GROUPER_CHANGE_LOG_ENTRY_TEMP	.0859375
GROUPER_CHANGE_LOG_TYPE	.000061035
GROUPER_COMPOSITES	.001953125
GROUPER_DDL	.000061035
GROUPER_FIELDS	.000061035
GROUPER_GROUPS	.3671875
GROUPER_GROUP_SET	4.15332031
GROUPER_LOADER_LOG	.036132813
GROUPER_MEMBERS	.59375
GROUPER_MEMBERSHIPS	4.4453125
GROUPER_PIT_ATTRIBUTE_ASSIGN	.044921875
GROUPER_PIT_ATTRIBUTE_DEF	.000061035
GROUPER_PIT_ATTR_ASSN_ACTN	.000061035
GROUPER_PIT_ATTR_ASSN_ACTN_SET	.000061035
GROUPER_PIT_ATTR_ASSN_VALUE	.02734375
GROUPER_PIT_ATTR_DEF_NAME	.002929688
GROUPER_PIT_ATTR_DEF_NAME_SET	.002929688
GROUPER_PIT_FIELDS	.000061035
GROUPER_PIT_GROUPS	.247070313
GROUPER_PIT_GROUP_SET	4.87597656
GROUPER_PIT_MEMBERS	.33203125
GROUPER_PIT_MEMBERSHIPS	5.88476563
GROUPER_PIT_ROLE_SET	.000976563
GROUPER_PIT_STEMS	.140625
GROUPER_QZ_CRON_TRIGGERS	.000061035
GROUPER_QZ_FIRED_TRIGGERS	.000061035
GROUPER_QZ_JOB_DETAILS	.000061035
GROUPER_QZ_LOCKS	.000061035
GROUPER_QZ_SCHEDULER_STATE	.000061035
GROUPER_QZ_SIMPROP_TRIGGERS	.000061035
GROUPER_QZ_TRIGGERS	.000061035
GROUPER_ROLE_SET	.000427246
GROUPER_STEMS	.1875
GROUPER_STEM_SET	.4140625
GROUPER_TABLE_INDEX	.000061035
SUBJECT	.000061035
SUBJECTATTRIBUTE	.000061035

Index disk space usage

This is the total disk space used by indexes on each of the Grouper tables.

Table	Disk space (GB)
GROUPER_ATTRIBUTE_ASSIGN	0.0673828130
GROUPER_ATTRIBUTE_ASSIGN_VALUE	0.0095214860
GROUPER_ATTRIBUTE_DEF	0.0002441400
GROUPER_ATTRIBUTE_DEF_NAME	0.0017700190
GROUPER_ATTRIBUTE_DEF_NAME_SET	0.0053100590
GROUPER_ATTRIBUTE_DEF_SCOPE	0.0001220700
GROUPER_ATTR_ASSIGN_ACTION	0.0001220700
GROUPER_ATTR_ASSIGN_ACTION_SET	0.0002441400
GROUPER_AUDIT_ENTRY	18.9204101580
GROUPER_AUDIT_TYPE	0.0001220700
GROUPER_CHANGE_LOG_CONSUMER	0.0001220700
GROUPER_CHANGE_LOG_ENTRY	3.2520141610
GROUPER_CHANGE_LOG_ENTRY_TEMP	0.1224365250
GROUPER_CHANGE_LOG_TYPE	0.0001220700
GROUPER_COMPOSITES	0.0028686520
GROUPER_DDL	0.0001220700
GROUPER_FIELDS	0.0002441400
GROUPER_GROUPS	0.6962890630
GROUPER_GROUP_SET	11.5604858360
GROUPER_LOADER_LOG	0.0254516600
GROUPER_MEMBERS	0.8634033210
GROUPER_MEMBERSHIPS	24.0016479350
GROUPER_PIT_ATTRIBUTE_ASSIGN	0.1552734410
GROUPER_PIT_ATTRIBUTE_DEF	0.0004882800
GROUPER_PIT_ATTR_ASSN_ACTN	0.0003051750
GROUPER_PIT_ATTR_ASSN_ACTN_SET	0.0004272450
GROUPER_PIT_ATTR_ASSN_VALUE	0.0469970710
GROUPER_PIT_ATTR_DEF_NAME	0.0038452140
GROUPER_PIT_ATTR_DEF_NAME_SET	0.0046997070
GROUPER_PIT_FIELDS	0.0003662100
GROUPER_PIT_GROUPS	0.4638671890
GROUPER_PIT_GROUP_SET	14.7217407250
GROUPER_PIT_MEMBERS	0.5703735350
GROUPER_PIT_MEMBERSHIPS	15.8040161330
GROUPER_PIT_ROLE_SET	0.0021972660
GROUPER_PIT_STEMS	0.2714843770

GROUPER_QZ_CRON_TRIGGERS	0.0000610350
GROUPER_QZ_FIRED_TRIGGERS	0.0004272450
GROUPER_QZ_JOB_DETAILS	0.0001831050
GROUPER_QZ_LOCKS	0.0000610350
GROUPER_QZ_SCHEDULER_STATE	0.0000610350
GROUPER_QZ_SIMPROP_TRIGGERS	0.0000610350
GROUPER_QZ_TRIGGERS	0.0007934550
GROUPER_ROLE_SET	0.0010986330
GROUPER_STEMS	0.3280029290
GROUPER_STEM_SET	0.8203125000
GROUPER_TABLE_INDEX	0.0001220700
SUBJECT	0.0000610350
SUBJECTATTRIBUTE	0.0002441400