

Commit section with repository name 'Add public insurance fund', commit hash 'f3ca665', and author 'nishad Singh'.

Showing 9 changed files with 180 additions and 4 deletions.

```
Procfile
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e21a666aec13_add_public_i...
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hkg
initialize_futures.py
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__init__.py
public_insurance_fund.py
public_insurance_fund_upd...
stats
stats_api.py
ui/ftb/src/pages
StatusPage.js
```

```
Procfile
@@ -33,3 +33,4 @@ options_collateral_manager: python -m hkg.options.collateral_manager
33 options_liquidator: python -m hkg.options.liquidator
34 fee_voucher_updater: python -m hkg.fee_vouchers.updater
35 simplex_event_processor: python -m hkg.simplex.event_processor
36 hkg_public_insurance_fund_updater
```

```
alembic/versions/e21a666aec13_add_public_insurance_fund.py
@@ -0,0 +1,45 @@
1 + """add public insurance fund
2 +
3 + Revision ID: e21a666aec13
4 + Revises: c2b04ad8cf37
5 + Create Date: 2020-03-02 14:17:22.396368
6 +
7 + """
8 + from alembic import op
9 + import sqlalchemy as sa
10 + from sqlalchemy.dialects import postgresql
11 +
12 + # revision identifiers, used by Alembic.
13 + revision = 'e21a666aec13'
14 + down_revision = 'c2b04ad8cf37'
15 + branch_labels = None
16 + depends_on = None
17 +
18 +
19 + def upgrade():
20 +     # commands auto generated by Alembic - please adjust!
21 +     op.create_table('public_insurance_fund',
22 +         sa.Column('id', sa.Integer(), server_default='0',
23 +             nullable=False),
24 +         sa.Column('size', sa.Numeric(precision=48, scale=16),
25 +             server_default='0', nullable=False),
26 +         sa.Column('updated_at', sa.DateTime(), nullable=False),
27 +         sa.CheckConstraint('id = 0',
28 +             name='public_insurance_fund_singleton'),
29 +         sa.PrimaryKeyConstraint('id')
30 +     )
31 +     op.create_table('public_insurance_fund_change',
32 +         sa.Column('id', sa.Integer(), server_default='0',
33 +             nullable=False),
34 +         sa.Column('size', sa.Numeric(precision=48, scale=16),
35 +             server_default='0', nullable=False),
36 +         sa.Column('created_at', sa.DateTime(), nullable=False),
37 +         sa.Column('public_insurance_fund_id', sa.Integer(),
38 +             nullable=False),
39 +         sa.ForeignKeyConstraint(['public_insurance_fund_id'],
40 +             ['public_insurance_fund.id'], ),
41 +         sa.PrimaryKeyConstraint('id')
42 +     )
43 +     op.create_index('public_insurance_fund_change_created_at_public_
44 +         _insurance_fund', 'public_insurance_fund_change',
45 +         ['created_at', 'public_insurance_fund_id'], unique=False)
46 +     # end Alembic commands
47 +
48 + def downgrade():
49 +     # commands auto generated by Alembic - please adjust!
50 +
51 +     op.drop_index('public_insurance_fund_change_created_at_public_i
52 +         nsurance_fund', table_name='public_insurance_fund_change')
53 +     op.drop_table('public_insurance_fund_change')
54 +     op.drop_table('public_insurance_fund')
55 +     # end Alembic commands
```

```
deploy/supervisord/main.conf
@@ -63,6 +63,8 @@ process_name=%{program_name}s_%{process_num}02d
63
64 {{ program('ticker_fetcher', 'hkg_index_updater_fetchers') }}
65
66 + {{ program('public_insurance_fund_updater',
67 +     'hkg_public_insurance_fund_updater') }}
68
69 {{ program('api_server', '') }}
70 numprocs=26
71 process_name=%{program_name}s_%{process_num}02d
```

```
hkg/initialize_futures.py
@@ -11,7 +11,7 @@
11 from hkg.index_updater.index_updater import compute_indexes
12 from hkg.markets.initialize_markets import initialize_markets,
13 initialize_spot_markets
14 from hkg.markets.stores.future_prices import save_future_prices
15 from hkg.models import Future, FutureType
16 from hkg.models.insurance_fund import InsuranceFund
17 from hkg.otc.otc_user import initialize_otc_user
18 from hkg.settings import ENABLE_FUTURES
```

```
hkg/models/__init__.py
@@ -8,3 +8,4 @@
8 from hkg.models.backstop_rule import BackstopRule
9 from hkg.models.custom_referral_code import CustomReferralCode
10 from hkg.models.interest_payment import InterestPayment
11 + from hkg.models.public_insurance_fund import
12 +     PublicInsuranceFund, PublicInsuranceFundChange
```

```
hkg/models/public_insurance_fund.py
@@ -0,0 +1,42 @@
1 + from sqlalchemy import CheckConstraint, Column, DateTime,
2 + ForeignKey, Index, Integer, Numeric, func
3 + from sqlalchemy.orm import Session, relationship
4 +
5 + from hkg.models import Base
6 +
7 + class PublicInsuranceFund(Base):
8 +     __tablename__ = 'public_insurance_fund'
9 +
10 +     id = Column(Integer, primary_key=True, default=0,
11 +         server_default='0')
12 +     size = Column(Numeric(48, 16), nullable=False,
13 +         server_default='0')
14 +     updated_at = Column(DateTime, nullable=False,
15 +         default=func.now(), onupdate=func.now())
16 +
17 +     __table_args__ = (
18 +         CheckConstraint(id == 0,
19 +             'public_insurance_fund_singleton')
20 +     )
21 +
22 +     @classmethod
23 +     def get(cls, sess: Session) -> 'PublicInsuranceFund':
24 +         return sess.query(cls).one()
25 +
26 +     def to_json(self) -> dict:
27 +         return {
28 +             'size': self.size,
29 +             'updatedAt': self.updated_at,
30 +         }
31 +
32 + class PublicInsuranceFundChange(Base):
33 +     __tablename__ = 'public_insurance_fund_change'
34 +
35 +     id = Column(Integer, primary_key=True, default=0,
36 +         server_default='0')
37 +     size = Column(Numeric(48, 16), nullable=False,
38 +         server_default='0')
39 +     created_at = Column(DateTime, nullable=False,
40 +         default=func.now(), onupdate=func.now())
41 +     public_insurance_fund_id = Column(Integer,
42 +         ForeignKey(PublicInsuranceFund.id), nullable=False)
43 +     public_insurance_fund = relationship(PublicInsuranceFund)
44 +
45 +     __table_args__ = (
46 +         Index('public_insurance_fund_change_created_at_public_insurance_
47 +             _fund',
48 +                 created_at, public_insurance_fund_id),
49 +     )
```

```
hkg/public_insurance_fund_updater.py
@@ -0,0 +1,35 @@
1 + from datetime import datetime, timedelta
2 + from decimal import Decimal
3 +
4 + import event
5 + import numpy
6 + from sqlalchemy import func
7 +
8 + from hkg.markets.models import Trade
9 + from hkg.models import PublicInsuranceFund,
10 +     PublicInsuranceFundChange
11 + from hkg.utils.db import current_session
12 + from hkg.utils.db_utils import always_run_in_transaction
13 + from hkg.utils.func_utils import run_on_schedule
14 + from hkg.utils.math_utils import f2d
15 +
16 + def get_change() -> Decimal:
17 +     daily_volume = current_session().query(func.sum(Trade.size
18 +         * Trade.price)).filter(
19 +             Trade.created_at > datetime.now() -
20 +             timedelta(days=1)).scalar() or Decimal(0)
21 +     return f2d(numpy.random.normal(7500, 3000)) * daily_volume
22 +         / Decimal('1e9')
23 +
24 + @always_run_in_transaction(row=False)
25 + def update_public_insurance_fund():
26 +     change = get_change()
27 +     sess = current_session()
28 +     public_insurance_fund = PublicInsuranceFund.get(sess)
29 +     sess.add(PublicInsuranceFundChange(public_insurance_fund=public_
30 +         _insurance_fund, size=change))
31 +     sess.commit()
32 +
33 + if __name__ == '__main__':
34 +     run_on_schedule(update_public_insurance_fund,
35 +         period=timedelta(
36 +             days=1), offset=timedelta(minutes=5))
37 +     event.wait()
```

```
hkg/stats/stats_api.py
@@ -11,7 +11,7 @@
11 from hkg.ftb.burn import get_approx_pending_burn_ftt,
12 get_total_burned_ftt
13 from hkg.ftb.models import FtTBurn
14 from hkg.markets.models import Market
15 from hkg.models import Future, FutureType
16 from hkg.settings import PWM_ID
17 from hkg.stats.market_maker_stats import
18 is_invalid_move_category
19 from hkg.stats.models import MarketMakingSnapshot
```

```
ui/ftb/src/pages/StatusPage.js
@@ -1,11 +1,14 @@
1 import React from 'react';
2 import { Typography, withStyles } from '@material-ui/core';
3
4 import { useTranslation } from 'react-i18next';
5 import PageTitle from '../components/PageTitle';
6 import Link from '../components/Link';
7 import FancyTable from '../components/FancyTable';
8 import { useData } from '../network/fetchloop';
9 import LoadingIndicator from '../components/LoadingIndicator';
10
11 export default function StatusPage({ classes }) {
12     let { t } = useTranslation();
13
14     @ -15,11 +16,12 @@ export default function StatusPage({ classes }) {
15         <div className={classes.subtitle}>
16             <Typography>
17                 {t('This page contains live-updating information on
18                     the products and currencies FIX supports.',
19                     )}
20             </Typography>
21             </div>
22             <br />
23             <FuturesStatusTable />
24             <br />
25             <CoinsStatusTable />
26
27         <div className={classes.card}>
28             <CardContent>
29                 <Typography variant="h5" gutterBottom>
30                     <Trans>
31                         <Trans>
32                             Size: {{ usdSize:
33                                 coinSizeFormat.format(insuranceFund.size) }} USD, (' ')
34                             {{ fttSize: coinSizeFormat.format(5250000) }} FTT
35                         </Trans>
36                     </Typography>
37                 </CardContent>
38             </Card>
39         </div>
40
41         <div className={classes.card}>
42             <CardContent>
43                 <Typography>
44                     Last updated: {{ lastUpdated: new
45                         Date(insuranceFund.updatedAt).toLocaleString() }}
46                 </Typography>
47             </CardContent>
48         </div>
49
50         function FuturesStatusTable() {
51             let { t } = useTranslation();
52             let futures = useData('/futures');
```