Docker Compose + Airflow Database Connection CheatSheet

Airflow is a highly configurable WMS that relies on sqlalchemy for its connection strings. There are subtle differences in a typical sqlalchemy connection string and a Celery connection string that I will illustrate below.

Set these variables in your docker-compose and your airflow.cfg (~/airflow/airflow.cfg) in order to get up and running with a killer Airflow Dev Environment!

Docker Compose Service	Connection
Typical SQLAlchemy	
airflow_postgres_db: image: postgres:11.1 # Set up postgres database name and password environment: POSTGRES_DATABASE: airflow POSTGRES_USER: airflow POSTGRES_PASSWORD: password	# \$DB_TYPE+\$DB_DRIVER://\$USER: \$PASSWORD@\$HOST:\$PORT/ \$DATABASE_NAME sql_alchemy_conn = postgresql+psycopg2:// airflow:password@airflow_postgres_db: 5432/airflow
Celery Specific SQLAlchemy	
celery_results_postgres_db: image: postgres:11.1 environment: # Set up postgres database name and password POSTGRES_PASSWORD: password POSTGRES_DATABASE: celery POSTGRES_USER: celery	# http://docs.celeryproject.org/en/latest/ userguide/configuration.html#task-result- backend-settings result_backend = db+postgresql+psycopg2:// celery:password@celery_results_postgres _db:5432/celery
Celery Broker Celery Specific SQLAlchemy	
rabbit: hostname: rabbit image: rabbitmq:latest environment: RABBITMQ_DEFAULT_USER: admin RABBITMQ_DEFAULT_PASS: mypass SERVICE_PORTS: 5672 TCP_PORTS: 5672	broker_url = amqp:// admin:mypass@rabbit:5672