

Week 2 Slide

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What I did this week

1. Get approval for the project plan
2. Attended Global Forum 2021 event
3. Set up Ubuntu 20.04 LTS and the environment
4. Studied Iroha document (<https://iroha.readthedocs.io/en/main/index.html>)
5. Built Iroha via normal compiling + docker (help from Greg)
6. Studied + worked on Iroha's Dockerfile
7. Studied existing "xxx-test-ledger.ts" files (besu/corda/fabric) + worked on "iroha-test-ledger.ts" under cactus-test-tooling/src
8. Uploaded 6 and 7 to my Github

General questions

1. Do modifications to project plan later on (after publishing)
2. Reimburse of training courses?
3. Cloud server provided? (Asking for Ayush)

Issues w/ current Iroha Dockerfile (hyperledger/iroha:develop-build)

<https://docs.google.com/document/d/1L5SyGytjOZnQFiP5sOXzEc0ftPQfZoeSvW5XI9wOGso/edit>

```
root@41e0f9660498:/opt/iroha/build

../irohad/main/iroha_conf_loader.cpp:584:3:   required from here
../irohad/main/iroha_conf_loader.cpp:581:7: warning: catching polymorphic type 'class JsonDeserializerException' by value [-Wcatch-values]
581 |     } catch (JsonDeserializerException e) {
    |           ^
[78/878] Building CXX object irohad/ordering/CMakeFiles/on_demand_ordering_gate.dir/impl/on_demand_ordering_gate.o
../irohad/ordering/impl/on_demand_ordering_gate.cpp: In member function 'std::shared_ptr<const shared_model::interface::Proposal> iroha::ordering::OnDemandOrderingGate::removeReplaysAndDup
licates(std::shared_ptr<const shared_model::interface::Proposal>) const':
../irohad/ordering/impl/on_demand_ordering_gate.cpp:199:21: warning: redundant move in return statement [-Wredundant-move]
199 |     return std::move(proposal);
    |           ^
../irohad/ordering/impl/on_demand_ordering_gate.cpp:199:21: note: remove 'std::move' call
[108/878] Building CXX object irohad/util/CMakeFiles/irohad_utility_proto_status_tools.dir/proto_status_tools.o
../irohad/util/proto_status_tools.cpp: In function 'iroha::utility_service::status iroha::utility_service::makeStatus(const iroha::utility_service::proto::Status_StatusEnum&):
../irohad/util/proto_status_tools.cpp:38:10: warning: enumeration value 'Status_StatusEnum_Status_StatusEnum_INT_MIN_SENTINEL_DO_NOT_USE_' not handled in switch [-Wswitch]
38 |     switch (v) { BOOST_PP_REPEAT(NUM_ELEMS, SWR, ) }
    |           ^
../irohad/util/proto_status_tools.cpp:48:7: note: in expansion of macro 'SW_ALL_RIGHT'
48 |     SW_ALL_RIGHT(status)
    |     ^
../irohad/util/proto_status_tools.cpp:38:10: warning: enumeration value 'Status_StatusEnum_Status_StatusEnum_INT_MAX_SENTINEL_DO_NOT_USE_' not handled in switch [-Wswitch]
38 |     switch (v) { BOOST_PP_REPEAT(NUM_ELEMS, SWR, ) }
    |           ^
../irohad/util/proto_status_tools.cpp:48:7: note: in expansion of macro 'SW_ALL_RIGHT'
48 |     SW_ALL_RIGHT(status)
    |     ^
[250/878] Building CXX object irohad/ametsucht/CMakeFiles/ametsucht.dir/impl/postgres_setting_query.o
../irohad/ametsucht/impl/postgres_setting_query.cpp: In member function 'iroha::expected::Result<std::unique_ptr<const shared_model::validation::Settings>, std::cxx11::basic_string<char
> > iroha::ametsucht::PostgresSettingQuery::update(std::unique_ptr<shared_model::validation::Settings>):
../irohad/ametsucht/impl/postgres_setting_query.cpp:64:19: warning: redundant move in return statement [-Wredundant-move]
64 |     return std::move(base);
    |           ^
../irohad/ametsucht/impl/postgres_setting_query.cpp:64:19: note: remove 'std::move' call
[254/878] Building CXX object irohad/ametsucht/data_models/CMakeFiles/data_model_adapter_python.dir/data_model_adapter_python.o
FATAL: irohad/ametsucht/data_models/CMakeFiles/data_model_adapter_python.dir/data_model_adapter_python.o
/usr/bin/c++ -DBOOST_MPL_CFG_NO_PREPROCESSED_HEADERS -DBOOST_MPL_LIMIT_LIST_SIZE=30 -DBOOST_NO_RTTI -DFMT_LOCALE -DSPDLOG_COMPILED_LIB -DSPDLOG_FMT_EXTERN
AL -I./shared_model -I./irohad -I./libs -Ischema -Isystem /opt/vcpkg/installed/x64-linux/include -Wall -fdiagnostics-color=always -g -g -Wextra -Wno-unused-parameter -Wno-deprecated-dec
larations -O0 -fPIE -ped25519_EXPORTS -std-gnu++17 -MD -MT irohad/ametsucht/data_models/CMakeFiles/data_model_adapter_python.dir/data_model_adapter_python.o -MF irohad/ametsucht/data_models/CMa
kFiles/data_model_adapter_python.dir/data_model_adapter_python.o.d -o irohad/ametsucht/data_models/CMakeFiles/data_model_adapter_python.dir/data_model_adapter_python.o -c ../irohad/ametsucht/data_models/d
ata_model_adapter_python.cpp
In file included from /opt/vcpkg/installed/x64-linux/include/pybind11/buffer_info.h:12,
from ../irohad/ametsucht/data_models/data_model_adapter_python.cpp:8:
/opt/vcpkg/installed/x64-linux/include/pybind11/detail/common.h:124:10: fatal error: Python.h: No such file or directory
124 | #include <Python.h>
    |          ^
compilation terminated.
[261/878] Building CXX object irohad/ametsucht/CMakeFiles/ametsucht.dir/impl/postgres_specific_query_executor.o
ninja: build stopped: subcommand failed.
root@41e0f9660498:/opt/iroha/build# cd ..
root@41e0f9660498:/opt/iroha# ls
CMakeLists.txt  Doxyfile  MAINTAINERS.md  build  docker  goSrc  Irohad  schema  snap  utils
```

Questions for Iroha All-in-one (AIO) docker

https://github.com/hxlaf/iroha_docker

1. Single Dockerfile of purely Iroha daemon (node)
2. Single Dockerfile of purely Iroha daemon+postgres
3. Docker compose of Iroha daemon + postgres alpine
4. Slim the docker package (currently 38.3GB)
5. Probably I want to finish this AIO docker ASAP?

```
han@han-ubuntu: /media/win/Users/no47c/.ssh$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
hyperledger/iroha	test2	40426cf6c6e9	2 hours ago	38.3GB
hyperledger/besu	latest	515362917be6	10 days ago	326MB
hyperledger/iroha	develop-build	18d58967bf2f	2 weeks ago	4.66GB
ubuntu	21.04	478aa0080b60	2 weeks ago	74.1MB

Questions for "iroha-test-ledger.ts"

https://github.com/hxlaf/cactus/tree/iroha_plugin

1. Use methods from the Container.ts class?
2. Ports (20000-debugger, 50051-Torii, 55552-TLS) > All RPC?
3. How about 10001 port ?
(<https://iroha.readthedocs.io/en/main/maintenance/sec-install.html?highlight=10001#network-configuration>)
4. How to test? (how to run?)

Questions for me

Expectation of Week 3

Thank you!