

Tasks Completed Today (12 - 06 -19):

1. Created virtual environment for Python2 and Python 3.
2. Understand about the uses of future library(http://python-future.org/automatic_conversion.html#step-0-setup) –
 1. Stage 1 : showing differences between python2 and python3 code without doing any changes in python code so, code is still in running stage in python2.
 2. Stage 2 : write the final changes in python file and make some manual changes as well.
3. Converted a little python 2 code to Python 3 code.
4. Knowledge about Fabric library:
 1. Automatically access Remote Desktop (server).
 2. Removes manual requirements of again and again writing IP for accessing server system.
 3. Run small piece of fabric code with python2 and python3.
 4. Fabric 1.x is compatible with Python2 only.
5. Find out about the need to migrate from fabric 1.x to 2.x.

Task Completed Today (13-06-19):

6. Git clone this repo: st-automation.
7. Run sample_validation_hive in python 2 and fabric < 2.0 environment and then same running in python3 and fabric3 environment.
8. Using fabric3 instead of fabric2 for python3 because fabric2 not includes below properties that are being used in fabric1.x:
 1. disableknown_hosts
 2. Abort_on_prompt
9. Converting sample_validation_hive from python2 to python3 using future library.
 1. Command :futurize —stage1 st-automation/nimble
 2. Command: futurize —stage2 -w st-automation/nimble
10. Running code using all arguments and environment (python3 and fabric3).
11. Error Detected: File: sqlite_adapter Line 19:
Helper.call_all(CustomFunctions(self.conn)).
12. If we comment above line then sample_validation_hive runs successfully.

REPORT (13-06-19)

Command Used:

futurize --stage1 /Users/divyanshrivastava/github_repo/st-automation/nimble

Result:

RefactoringTool: Skipping implicit fixer: idioms
RefactoringTool: Skipping implicit fixer: ws_comma
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/base/data_replication/data_replication_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/base/operability/file_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/base/regression/actual_output_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/base/regression/actual_vs_expected_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/base/validation/validation_entities.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/base/validation/urlcat/urlcategorization_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/sample/sample_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/calendar_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/filter_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/ktrs_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/multi_select_dropdown_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/popup_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/single_select_list_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/slider_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/stacked_bar_chart_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/table_actions.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/ui/base/ui_action_factory.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/global_constants.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/cdap/cdap_rest_client_adapter.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/elasticsearch/base_elasticsearch_adapter.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/elasticsearch/elasticsearch_python_client_adapter.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/hadoop/base_hadoop_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/hadoop/hadoop_cli_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/hbase/base_hbase_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/hbase/hbase_cli_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/hive/base_hive_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/hive/hive_python_client_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/impala/impala_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/kafka/base_kafka_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/kafka/kafka_cli_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/kafka/kafka_python_client_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/kafka/serdes/avro_serdes.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/kafka/serdes/collector_bytearray_serdes.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/kafka/serdes/serdes_factory.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/postgres/base_postgres_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/postgres/postgres_python_client_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/sqlite/custom_functions.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/sqlite/sqlite_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/zookeeper/base_zookeeper_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/adapters/zookeeper/zookeeper_cli_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/api/api_request.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/api/api_request_specification.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/configs/base_yaml_parser.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/configs/scheduler_config_factory.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/configs/scheduler_config_parser.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/configs/source_config_factory.py
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RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/string_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/vm_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/ambari_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/atlas_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/azkaban_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/collector_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/docker_utils.py
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RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/ha_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/hadoop_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/healthcheck_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/hive_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/janusgraph_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/kafka_mm_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/kafkaconnect_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/kubernetes_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/nifi_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/phoenix_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/postgres_utils.py
RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/prometheus_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/redis_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/spark_utils.py

RefactoringTool: Refactored /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/azkaccli/azkaban_cli.py

```
--- /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/utils/components/azkaccli/azkaban_cli.py    (original)
+++ /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/utils/components/azkaccli/azkaban_cli.py    (refactored)
@@ -58,6 +58,8 @@
```

```
    <first_date> must follow format '04/21/2016' (MM/DD/YYYY)
```

```
    <period> must follow format '3w' (possible values: s, m, h, d, w, M)
```

```
"""
```

```
+from __future__ import print_function
+from __future__ import absolute_import
from collections import namedtuple
from datetime import datetime, timedelta
from pprint import pprint
@@ -68,8 +70,8 @@
import sys
import re
```

```
-from docopt import docopt
-from tabulate import tabulate
+from .docopt import docopt
+from .tabulate import tabulate
from os.path import sep as pathsep
import requests
import yaml
```

RefactoringTool: Refactored /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/azkaccli/docopt.py

```
--- /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/utils/components/azkaccli/docopt.py    (original)
+++ /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/utils/components/azkaccli/docopt.py    (refactored)
@@ -6,6 +6,7 @@
```

```
* Copyright (c) 2013 Vladimir Keleshev, vladimir@keleshev.com
```

```
"""
```

```
+from __future__ import print_function
import sys
import re
```

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/azkaccli/tabulate.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/conftest.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/db/sqlite/test_custom_functions.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/db/sqlite/test_sqlite_adapter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/entity/test_guavus_response.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/filters/test_filter.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/parser/test_json_parser.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/test_collection_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/test_csv_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/test_dataframe_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/test_file_server_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/test_file_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/test_report_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/test_shell_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/test_string_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/components/test_ambari_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/components/test_atlas_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/components/test_docker_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/components/test_kafka_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/components/test_nifi_utils.py

RefactoringTool: No changes to /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utis/components/test_redis_utils.py

RefactoringTool: Files that need to be modified:

RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/base/data_replication/data_replication_actions.py

RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/actions/base/operability/file_actions.py

RefactoringTool: /Users/divyanshshrivastava/github_repo/st-

automation/nimble/actions/base/regression/actual_output_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/base/regression/actual_vs_expected_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/base/validation/validation_entities.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/base/validation/urlcat/urlcategorization_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/sample/sample_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/ui/base/calendar_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/ui/base/filter_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/ui/base/ktrs_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/ui/base/multi_select_dropdown_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/ui/base/popup_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/ui/base/single_select_list_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/ui/base/slider_actions.py
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automation/nimble/actions/ui/base/stacked_bar_chart_actions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/actions/ui/base/table_actions.py
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automation/nimble/actions/ui/base/ui_action_factory.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/global_constants.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/cdap/cdap_rest_client_adapter.py
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automation/nimble/core/adapters/elasticsearch/base_elasticsearch_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/elasticsearch/elasticsearch_python_client_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/hadoop/base_hadoop_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/hadoop/hadoop_cli_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/hbase/base_hbase_adapter.py
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automation/nimble/core/adapters/hbase/hbase_cli_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-

automation/nimble/core/adapters/hive/base_hive_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/hive/hive_python_client_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/impala/impala_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/kafka/base_kafka_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/kafka/kafka_cli_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/kafka/kafka_python_client_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/kafka/serdes/avro_serdes.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/kafka/serdes/collector_bytearray_serdes.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/kafka/serdes/serdes_factory.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/postgres/base_postgres_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/postgres/postgres_python_client_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/sqlite/custom_functions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/sqlite/sqlite_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/zookeeper/base_zookeeper_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/adapters/zookeeper/zookeeper_cli_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/api/api_request.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/api/api_request_specification.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/configs/base_yaml_parser.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/configs/scheduler_config_factory.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/configs/scheduler_config_parser.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/configs/source_config_factory.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/configs/source_config_parser.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/configs/testbed_config_parser.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-

automation/nimble/core/configs/validation_config_parser.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/entity/component_factory.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/entity/file_format.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/entity/guavus_response.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/entity/mode.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/entity/node_manager.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/entity/nodes.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/filters/filter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/filters/filter_factory.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/schedulers/azkaban_scheduler.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/schedulers/cdap_scheduler.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/schedulers/oozie_scheduler.py
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RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/transformers/elasticsearch_transformer.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/transformers/file_format_factory.py
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RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/transformers/hive_transformer.py
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automation/nimble/core/transformers/impala_transformer.py
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automation/nimble/core/transformers/janusgraph_transformer.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/transformers/json_transformer.py
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automation/nimble/core/transformers/kafka_transformer.py
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automation/nimble/core/transformers/parquet_transformer.py
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automation/nimble/core/transformers/redis_transformer.py
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automation/nimble/core/transformers/transformer_factory.py
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automation/nimble/core/transformers/xml_transformer.py
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automation/nimble/core/ui/utls/selenium_utls.py
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automation/nimble/core/utls/collection_utls.py
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automation/nimble/core/utls/csv_utls.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-
automation/nimble/core/utls/dataframe_utls.py
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automation/nimble/core/utls/date_utls.py
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automation/nimble/core/utls/multiprocessing_utls.py
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automation/nimble/core/utls/report_utls.py
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automation/nimble/core/utls/shell_utls.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-

automation/nimble/core/utils/string_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/vm_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/ambari_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/atlas_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/azkaban_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/collector_utils.py
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RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/hive_utils.py
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RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/kafka_mm_utils.py
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RefactoringTool: /Users/divyanshshrivastava/github_repo/st-

automation/nimble/core/utils/components/azkaccli/docopt.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/core/utils/components/azkaccli/tabulate.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/conftest.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/db/sqlite/test_custom_functions.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/db/sqlite/test_sqlite_adapter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/entity/test_guavus_response.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/filters/test_filter.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/parser/test_json_parser.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/test_collection_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/test_csv_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/test_dataframe_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/test_file_server_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/test_file_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/test_report_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/test_shell_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/test_string_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/components/test_ambari_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/components/test_atlas_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/components/test_docker_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/components/test_kafka_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/components/test_nifi_utils.py
RefactoringTool: /Users/divyanshshrivastava/github_repo/st-automation/nimble/tests/core/utils/components/test_redis_utils.py

After using future lib and fabric3 lib-

Error file: nimble/core/utils/helper.py

Issue 1:

```
> return ValidationConfigParser(OPTIONS_DICT["validationConfig"])
```

nimble/tests/conftest.py:63:

```
-----
nimble/core/configs/validation_config_parser.py:44: in __init__
    self.sqlite_adapter = SqliteAdapter(db_file=self.sqlite_file_path)
nimble/core/adapters/sqlite/sqlite_adapter.py:19: in __init__
    Helper.call_all(CustomFunctions(self.conn))
nimble/core/utils/helper.py:46: in call_all
    attribute(*args, **kwargs)
-----

self = <nimble.core.adapters.sqlite.custom_functions.CustomFunctions object at
0x11b0a5210>
```

```
def __native__(self):
    """
    Hook for the future.utils.native() function
    """
> return object(self)
E   TypeError: object() takes no parameters
```

Issue 2:

```
-----
nimble/core/utils/report_utils.py:218: in dump_allure_env_file
    CsvUtils.dump_csv_as_key_value(dictionary,
global_constants.DEFAULT_ALLURE_ENV_PATH, mode="a+", delimiter="=")
nimble/core/utils/csv_utils.py:108: in dump_csv_as_key_value
    writer.writerow([key, value])
../Fabric_Convert/venv/lib/python3.7/site-packages/unicodcsv/py3.py:28: in writerow
    return self.writer.writerow(row)
-----
```

```
self = <unicodcsv.py3._UnicodeWriteWrapper object at 0x11997a748>
string = 'Project=platform\r\n'
```

```
def write(self, string):
```

```
> returnself.binary.write(string.encode(self.encoding, self.errors))
E   TypeError: write() argument must be str, not bytes
```

```
nimble/core/utils/fabric_utils.py:35: in run_command_on_remote
    returnoperations.run(command, timeout=command_timeout)
```

<https://link.springer.com/content/pdf/bbm%3A978-1-4302-2416-7%2F1.pdf>

REPORT (14-06-19)

Issue 3:

```
-----
nimble/core/utils/report_utils.py:218: in dump_allure_env_file
    CsvUtils.dump_csv_as_key_value(dictionary,
global_constants.DEFAULT_ALLURE_ENV_PATH, mode="a+", delimiter="=")
nimble/core/utils/csv_utils.py:108: in dump_csv_as_key_value
    writer.writerow([key, value])
../Fabric_Convert/venv/lib/python3.7/site-packages/unicodcsv/py3.py:28: in writerow
    returnself.writer.writerow(row)
-----
```

```
self = <unicodcsv.py3._UnicodeWriteWrapper object at 0x11997a748>
string = 'Project=platform\r\n'
```

```
    def write(self, string):
>     returnself.binary.write(string.encode(self.encoding, self.errors))
E   TypeError: write() argument must be str, not bytes
```



```
nimble/core/utils/fabric_utils.py:35: in run_command_on_remote
    return operations.run(command, timeout=command_timeout)
```

Next iterator:- <https://link.springer.com/content/pdf/bbm%3A978-1-4302-2416-7%2F1.pdf>

Pathlib2 available in 3.7 (still not downloaded)

Scandir available in 3.7 (still not downloaded)

Singledispatch available upto 3.4

Ippaddress available upto 3.6

enum34 backporting upto 3.3 and not compatible with 3.6/3.7

Funsigs tested upto python 3.5

Futures not compatible in python 3

Contextlib2 tested in python 3 no more information

Backport-abc=0.5 not installed in python 3 and for running it in 3.7

try:

```
# ABCs live in "collections.abc" in Python >= 3.3
from collections.abc import Coroutine, Generator
except ImportError:
    # fall back to import from "backports_abc"
    from backports_abc import Coroutine, Generator
```

Backport.function_lru_cache available for python >= 2.6 but not installed for using it changes in python 3

try:

```
from functools import lru_cache
except ImportError:
    from backports.functools_lru_cache import lru_cache
```

Avro not supported in python 3:

Created virtual environment of python 3 and install Avro using

pip install avro

Avro 1.9.0 installed

Run a python file containing import Avro

Error occurred:

Traceback (most recent call last):

File "p.y", line 1, in <module>

import avro

ModuleNotFoundError: No module named 'avro'

But if we use Avro-python3 no error occurred.

Task Completed Today (17-06-19):

13. Avro 1.9.0 not supported in python3 so tried version Avro-python3 but it alone doesn't support libraries like : Avro.io. Avro and Avro-python3 used together successfully ran all libraries in python3 of Avro. Python2 doesn't support avro-python3 (requires python>=3.4).
14. In shell_utils subprocess giving output in bytes therefore used encode="utf-8" now, it gives output in string but in Python 2 there is no argument like encoding so the alternative found for this is "universal_newline".

Found on Documentation about Universal_Newline: "If encoding or errors are specified, or text is true, file objects for stdin, stdout and stderr are opened in text mode using the specified encoding and errors or the io.TextIOWrapper default. The universal_newlines argument is equivalent to text and is provided for backwards compatibility. By default, file objects are opened in binary mode."

- In actual_output_actions.py file giving Error: "TypeError: '>' not supported between instances of int and NoneType" for aggregation_level in line 92. Python3 doesn't support comparison of None with int so, change the condition of if:

Before Changes:

```
if aggregation_level > 0 :
    aggregate_column = "directory_name"
    remove_grouped_column = True
    if aggregate is True or aggregation_level > 0:
        Error :TypeError: '>' not supported between instances of int and NoneType
```

After Changes:

```
if aggregation_level is not None and aggregation_level > 0 :
    aggregate_column = "directory_name"
    remove_grouped_column = True
    if aggregate is True or (aggregation_level is not None and aggregation_level > 0 ):
        Status:Successful
```

6. Only aggregation_level error is removed and code runs successfully (because aggregation_level is common file) but if there are more such commands where there is a comparison between None and int python3 will give error

TEST VALIDATE HIVE.PY WITH PYTHON 3, AVRO-PYTHON3, FABRIC3 RUNNED SUCCESSFULLY.

NOW STARTED WORKING ON UNIT TEST CASES WHICH ARE FAILING IN PYTHON3.

REPORT (18-06-19):

COMPONENT FOLDER FILES:

- | | | |
|-----|----------------------------------|---------------------------|
| 15. | <u>TEST_AMBARI_UTILS</u> | TEST CASE FAILED : |
| | 0 TEST CASE PASSED: 7 | TEST CASE FAILED : 3 TEST |
| | CASE PASSED: 4 | |
| 16. | <u>TEST_ATLAS_UTILS</u> | TEST CASE FAILED : |
| | 3 TEST CASE PASSED: 0 | TEST CASE FAILED : 3 TEST |
| | CASE PASSED: 0 | |
| 17. | <u>TEST_CDAP_UTILS</u> | TEST CASE FAILED : |
| | 19 IGNORED:5 TEST CASE PASSED: 0 | TEST CASE FAILED : |
| | 19 IGNORED:5 TEST CASE PASSED: 0 | |
| 18. | <u>TEST_COLLECTOR_UTILS</u> | TEST CASE FAILED : |
| | 3 TEST CASE PASSED: 0 | TEST CASE FAILED : 3 TEST |
| | CASE PASSED: 0 | |
| 19. | <u>TEST_DOCKER_UTILS</u> | TEST CASE FAILED : |
| | 9 TEST CASE PASSED: 2 | TEST CASE FAILED : 3 TEST |
| | CASE PASSED: 0 | |
| 20. | <u>TEST_ELASTICSEARCH_UTILS</u> | TEST CASE FAILED : |
| | 3 TEST CASE PASSED: 0 | TEST CASE FAILED : 3 TEST |
| | CASE PASSED: 0 | |
| 21. | <u>TEST_HADOOP_UTILS</u> | TEST CASE FAILED : |
| | 8 TEST CASE PASSED: 0 | TEST CASE FAILED : 8 TEST |
| | CASE PASSED: 0 | |

Task Completed Today (18-06-19):

TEST_VALIDATE_HBASE: NO UPDATE REQUIRED WORKED IN BOTH PYTHON 2 AND PYTHON 3.

UNIT TEST CASES FAILED OR PASSED IN PYTHON 2 and PYTHON 3

- | | UNIT TEST CASE | |
|-----|-----------------------------|---------------------------|
| | PYTHON 2 | |
| | PYTHON 3 | |
| 22. | <u>TEST_CUSTOM_FUNCTION</u> | TEST CASE FAILED : |
| | 4 TEST CASE PASSED: 2 | TEST CASE FAILED: 2. TEST |
| | CASE PASSED: 2 | |
| 23. | <u>TEST_SQLITE_ADAPTER</u> | TEST CASE FAILED : |
| | 0 TEST CASE PASSED: 4 | TEST CASE FAILED :1 TEST |

	CASE PASSED: 3	
24.	TEST_GUAVUS_RESPONSE	TEST CASE FAILED :
	0 TEST CASE PASSED: 1	TEST CASE FAILED : 0 TEST
	CASE PASSED: 1	
25.	TEST_FILTER	TEST CASE FAILED :
	0 TEST CASE PASSED: 7	TEST CASE FAILED : 0 TEST
	CASE PASSED: 7	
26.	TEST_JSON_PARSER	TEST CASE FAILED : 0 TEST
	CASE PASSED: 1	TEST CASE FAILED : 0 TEST CASE
	PASSED: 1	
27.	TEST_SINGLETON	TEST CASE FAILED :
	0 TEST CASE PASSED: 1	TEST CASE FAILED : 0 TEST
	CASE PASSED: 1	
28.	TEST_BASE_TRANSFORMER	TEST CASE FAILED :
	0 TEST CASE PASSED: 1	TEST CASE FAILED : 0 TEST
	CASE PASSED: 1	
29.	TEST_COLLECTION_UTILS	TEST CASE FAILED :
	0 TEST CASE PASSED: 4	TEST CASE FAILED : 8 TEST
	CASE PASSED: 0	
30.	TEST_CSV_UTILS	TEST CASE FAILED :
	0 TEST CASE PASSED: 11	TEST CASE FAILED : 2 TEST
	CASE PASSED: 9	

Issue 4: Python 2 is allowing string to be decoded again in string but Python 3 corrected this issue by showing **ERROR:** "'str' object has no attribute 'decode'". Solved above problem by opening file in bytes format and then decoding it into string format.
CHANGED IN FILE "CSV_UTILS.PY" AT LINE 37: with open(file path,'rb') as f:

Issue 5: "TypeError: '<' not supported between instances of 'collections.OrderedDict' and 'collections.OrderedDict'". Python 2 takes default value without key in sorted function whereas python 3 requires a key value to tell about what basis ordered Dict to be sorted therefore python3 giving above error.

But our code already giving sorted values so if we remove sorted function code runs in both python2 and python 3.

CHANGED IN FILE "CSV_UTILS.PY" AT LINE 33 AND 47: assert self.unicode_safe_list(list_of_dicts) == CsvUtils.parse_csv(self.file_)

AFTER ABOVE CONVERSION ALL TEST CASES PASSED IN PYTHON2 AND PYTHON3.

• TEST_DATAFRAME_UTILS	TEST CASE FAILED : 0 TEST
CASE PASSED: 4	TEST CASE FAILED : 0 TEST CASE
PASSED: 4	
• TEST_DATE_UTILS	TEST CASE FAILED : 0 TEST
CASE PASSED: 2	TEST CASE FAILED : 0 TEST CASE

- PASSED: 2
- TEST_FILE_SERVER_UTILS
 - CASE PASSED: 1
 - PASSED: 1
- TEST_FILE_UTILS
 - CASE PASSED: 1
 - PASSED: 1
- TEST_IP_UTILS
 - CASE PASSED: 3
 - PASSED: 3
- TEST_REPORT_UTILS
 - CASE PASSED: 1
 - PASSED: 1
- TEST_SHELL_UTILS
 - CASE PASSED: 3
 - PASSED: 3
- TEST_STRING_UTILS
 - CASE PASSED: 1
 - PASSED: 2

TEST CASE FAILED : 2 TEST
TEST CASE FAILED : 2 TEST CASE

TEST CASE FAILED : 0 TEST
TEST CASE FAILED : 0 TEST CASE

TEST CASE FAILED : 0 TEST
TEST CASE FAILED : 0 TEST CASE

TEST CASE FAILED : 0 TEST
TEST CASE FAILED : 0 TEST CASE

TEST CASE FAILED : 1 TEST
TEST CASE FAILED : 1 TEST CASE

TEST CASE FAILED : 1 TEST
TEST CASE FAILED : 0 TEST CASE

• UNIT TEST CASES NOT PASSED IN PYTHON 2 AND PYTHON 3:

: TEST_CUSTOM_FUNCTION, TEST_FILE_SERVER_UTILS, TEST_SHELL_UTILS

UNIT TEST CASES RUNNED IN PYTHON 2 BUT NOT IN PYTHON 3

: TEST_SQLITE_ADAPTER

UNIT TEST CASES RUNNED IN PYTHON 3 BUT NOT IN PYTHON 2

: TEST_STRING_UTILS

UNIT TEST CHANGES MADE TO RUN IN PYTHON 3 AND PYTHON

2: TEST_CSV_UTILS

Task Completed Today (28-06-19):

31. In FILE_SERVER_UTILS there was an error showing no support for library urllib.parse in python 2 because in python3 this library is changed from URLPARSE (supported in python2) to URLLIB.PARSE. This change was made by future library. So, below changes made to solve above problem.

Before Changes:

```
fromurllib.parse import urlparse, urljoin
```

After Changes:

```
try:
```

```
fromurllib.parse import urlparse, urljoin
```

```
exceptImportError:
```

```
fromurlparse import urlparse, urljoin
```

- There was one more error in above file that it was not getting response from correct url.

Expected Url: https://192.168.192.201/guavus/tmp/

Output Url: https://192.168.192.201/tmp/

Found Issue 6: In url.join it was overwriting /guavus/ with /tmp/.So, the solution found that if we write ./ before relative url it will concatenate both urls rather than overwriting /guavus/.

Before Changes at line 60 in file file_server_utils.py: module_path = re.sub(r'/'+'', "/", module_path)

After Changes at line 60 in file file_server_utils.py: module_path = re.sub(r'^/', "./", module_path)

From above two changes all test cases passed.

Task Completed Today (01-07-2019):

32. In **TEST STRING UTIL** python 3 automatically converts unicode to string whereas python 2 lacks this things therefore test cases runs in python3 and some test cases fails in python 2.
33. **HEALTH CHECK TEST** No update required runs in both python 2 and python 3 (execution log of both python 2(targetold_health_check) and python 3(targetnew_health_check)) .
34. In **TEST SHELL UTILS** in python 3 showing error.

Issue 7: WARN ipc.Client: Exception encountered while connecting to the server : javax.security.sasl.SaslException: GSS initiate failed [Caused by GSSException: No valid credentials provided (Mechanism level: Failed to find any Kerberos tgt)]

Task Completed (02-07-2019):

		Python		Python 3
2				
35.	Test_hbase :	test case passed: 4	test case failed:	
	0		test case passed: 4	test case failed: 0
36.	Test_hdfs	test case passed: 3	test case failed:	
	0		test case passed: 3	test case failed: 0
37.	Test_hive	test case passed: 7	test case failed: 1	test case
	ignored: 4	test case passed: 7	test case failed: 1	test case
	ignored: 4			
38.	Test_kafka	test case passed: 1	test case failed: 0	test case
	ignored: 3	test case passed: 1	test case failed: 0	test case
	ignored: 3			
39.	Test_postgres	test case passed: 8	test case failed:	

	0	test case passed: 8	test case failed: 0
40.	Test_yarn	test case passed: 3	test case failed: 0
	0	test case passed: 3	test case failed: 0
41.	Test_zookeeper	test case passed: 0	test case failed: 0
	ignored: 1	test case passed: 0	test case failed: 0
	ignored: 1		

All unit test for sanity works fine with python 2 and python 3.

Test_Shell_Utils Fails due to no ticket generation before hitting HDFS component.

```
virtualenv --
python=/usr/local/Cellar/python/3.6.5_1/Frameworks/Python.framework/Versions/3.6/bin/python3.6 venv
```

<type 'list':>: [{11: 'aaa', 22: 'E-1'}, {33: 75, 11: 'bbb', 22: 'E-2'}]	Python2
<class 'list':>: [{11: 'aaa', 22: 'E-1'}, {11: 'bbb', 22: 'E-2', 33: 75}]	python 3
<class 'list':>: [{ 'name': 'aaa', 'id': 'E-1'}, { 'name': 'null', 'id': 'E-2', 'score': 75}]	python3
<type 'list':>: [{ 'name': 'aaa', 'id': 'E-1'}, { 'score': 75, 'name': 'null', 'id': 'E-2'}].	Python2

Task Completed Today(03-07-2019):

42. In sqlite_adapter table entry (name, id, score) for python 3 and table entry (score, id, name) for python 2. Therefore, assert is giving false for python 3.
43. Updated Requirements for python 3.6 and commit & pushed.
44. Locally with environment python 3.6 (including requirements.txt) all tests are running successfully. But

```
<class 'list':>: [('date_ts', 'date_ts_seconds', 'date_ts_milliseconds'), ('07/18/17-01:45:35', 1500342335, 1500342335000), ('07/18/17-01:45:35:581', 1500342335, 1500342335581), ('07/18/2017-01:45:35', 1500342335, 1500342335000), ('07/18/2017-01:45:35:581', 1500342335, 1500342335581), ('2017/07/18-01:45:35', 1500342335, 1500342335000), ('20170718014535', 1500342335, 1500342335000), ('20170718014535581', 1500342335, 1500342335581), ('1500342335', 1500342335, 1500342335000), ('07/18/2017 01:45:35', 1500342335, 1500342335000), ('07/18/17 01:45:35', 1500342335, 1500342335000),
```

```
('07/18/17 01:45:35:581', 1500342335, 1500342335581), ('07/18/2015 01:45:35',
1437183935, 1437183935000), ('07/18/2015 01:45:35:587', 1437183935,
1437183935587), ('1991/08/16 09:02:12', 682333332, 682333332000), ('07/18/2017
01:45:35:581', 1500342335, 1500342335581), ('07/18/17-01:45:35:5', 'invalid', 'invalid'),
('07/18/17-01:45:35:58123', 'invalid', 'invalid'), ('07/18/2017 01:45:35.581', 'invalid',
'invalid'), ('07/18/2017-01:45:35:abc', 'invalid', 'invalid'), ('07/18/2017 01:45:35:58123',
'invalid', 'invalid'), ('2017/07/18-01:45:35:581', 'invalid', 'invalid'), ('2017/07/18-
01:45:35:58123', 'invalid', 'invalid'), ('201707180145354', 'invalid', 'invalid'),
('2017071801453547', 'invalid', 'invalid'), ('20170718014535:581', 'invalid', 'invalid'),
('20170718014535581:581', 'invalid', 'invalid'), ('2017071801453558123', 'invalid',
'invalid'), ('07/18/17-01:45', 'invalid', 'invalid'), ('07/18/17-01:45', 'invalid', 'invalid'),
('07/18/2017', 'invalid', 'invalid'), ('2017071801', 'invalid', 'invalid'), ('abcdefgh', 'invalid',
'invalid'), (None, 'invalid', 'invalid')]]
```

```
<class 'list'>: [('date_ts', 'date_ts_miliseconds', 'date_ts_seconds'), ('07/18/17-01:45:35',
1500342335000, 1500342335), ('07/18/17-01:45:35:581', 1500342335581, 1500342335),
('07/18/2017-01:45:35', 1500342335000, 1500342335), ('07/18/2017-01:45:35:581',
1500342335581, 1500342335), ('2017/07/18-01:45:35', 1500342335000, 1500342335),
('20170718014535', 1500342335000, 1500342335), ('20170718014535581',
1500342335581, 1500342335), ('1500342335', 1500342335000, 1500342335),
('07/18/2017 01:45:35', 1500342335000, 1500342335), ('07/18/17 01:45:35',
1500342335000, 1500342335), ('07/18/17 01:45:35:581', 1500342335581, 1500342335),
('07/18/2015 01:45:35', 1437183935000, 1437183935), ('07/18/2015 01:45:35:587',
1437183935587, 1437183935), ('1991/08/16 09:02:12', 682333332000, 682333332),
('07/18/2017 01:45:35:581', 1500342335581, 1500342335), ('07/18/17-01:45:35:5',
'invalid', 'invalid'), ('07/18/17-01:45:35:58123', 'invalid', 'invalid'), ('07/18/2017
01:45:35.581', 'invalid', 'invalid'), ('07/18/2017-01:45:35:abc', 'invalid', 'invalid'),
('07/18/2017 01:45:35:58123', 'invalid', 'invalid'), ('2017/07/18-01:45:35:581', 'invalid',
'invalid'), ('2017/07/18-01:45:35:58123', 'invalid', 'invalid'), ('201707180145354',
'invalid', 'invalid'), ('2017071801453547', 'invalid', 'invalid'), ('20170718014535:581',
'invalid', 'invalid'), ('20170718014535581:581', 'invalid', 'invalid'),
('2017071801453558123', 'invalid', 'invalid'), ('07/18/17-01:45', 'invalid', 'invalid'),
('07/18/17-01:45', 'invalid', 'invalid'), ('07/18/2017', 'invalid', 'invalid'), ('2017071801',
'invalid', 'invalid'), ('abcdefgh', 'invalid', 'invalid'), (None, 'invalid', 'invalid')]]
```

Task Completed (08-07-2019):

45. bare-except (W0702):

46. *No exception type(s) specified* Used when an except clause doesn't specify

exceptions type to catch. - nimble/core/utils/helper

47.

48. 2. Disabling for now but should be fixed

49. Error: nimble/core/utils/collection_utils.py:149:0: E0012: Bad option value 'deprecated-lambda' (bad-option-value)
Some quick timing runs seem to give the 2nd option using range() a slight edge over enumerate()
timeit a = [f(n) for n, _ in enumerate(mlist)]

50. 10000 loops, best of 3: 118 us per loop

51.

52. timeit a = [f(n) for n in range(len(mlist))]

53. 10000 loops, best of 3: 102 us per loop and just for fun

using xrange() (Python v2.7.2) timeit a = [f(n) for n in xrange(len(mlist))]

54. 10000 loops, best of 3: 99 us per loop
Xrange() is faster in both above cases. In python3 range and xrange are same so using range will improve our performance. So, disabling below error.
Error: nimble/core/utils/collection_utils.py:108:8: C0200: Consider using enumerate instead of iterating with range and len (consider-using-enumerate)
3. Error: nimble/core/utils/components/azkaban_utils.py:6:0: W0622: Redefining built-in 'ConnectionError' (redefined-builtin)
Python already have built-in ConnectionError so from requests import ConnectionError was overwriting built-in function.
Solution: ConnectionError changed to requests.ConnectionError.
By overwriting list, I no longer have access to the list function until the program is closed. This can be dangerous, especially if you have code in a completely different module that depends on this function. Further, the error message only states 'str' object is not callable in this case, and (when run from a module instead of the interactive interpreter) would only point to the function call as the problem, not the place where it was overwritten.
https://www.reddit.com/r/pythontips/comments/4m9wiw/a_void_overwriting_python_functions/

55. 4. Error: nimble/core/adapters/sqlite/custom_functions.py:43:36: R1719: The if expression can be replaced with 'bool(test)' (simplifiable-if-expression)
----Not understand

5. Error: nimble/core/adapters/kafka/serdes/avro_serdes.py:87:22: E1101: Module 'avro.schema' has no 'make_avsc_object' member (no-member)
----Not understand

6. Error: nimble/core/schedulers/cdap_scheduler.py:95:72: E1101: Instance of 'AttributeError' has no 'message' member (no-member)
Solution: <https://stackoverflow.com/questions/35990313/avoid-pylint-warning-e1101-instance-of-has-no-member-for-class-with-dyn>
----Not understand

56. Code changes:
1. nimble/core/utils/components/ha_utils.py:15:11: R1714: Consider merging these comparisons with "in" to "process_id_after_kill_process in (process_id,)" (consider-using-in)
----to be discussed
2. Avro_serdes = parse to Parse(in avro-

python3), collector_bytes_serdes (line 56 parse to Parse(avro-python3).Registry_less_avro_serdes (line 90 parse to Parse(avro-python3)).3. In solution_installer_config_parser.py Error: dict comprehension # properties = dict([(k, self.replace_timestamp(v, fetch_from_server=False)) for k, v in list(properties.items())]) changed to properties = {(k, self.replace_timestamp(v, fetch_from_server=False)) for k, v in list(properties.items())}4. In test_cdap_utils.py:184:11: C0121: Comparison to True should be just 'not expr' (singleton-comparison) # if cdap_rest_client_utils.create_dataset(payload_insert, name).ok != True: changed to if not cdap_rest_client_utils.create_dataset(payload_insert, name).ok:5. In cdap_scheduler.py:95:72: E1101: Instance of 'AttributeError' has no 'message' member (no-member) # job_response_list.append(JobResponse(status=False, data=str(e.message))) changed to job_response_list.append(JobResponse(status=False, data=str(e))) Same for Actual_VS_Expected_option.

57.
58. Pylint changes: C0200

nimble/actions/base/validation/urlcat/__init__.py:1:0: R0401: Cyclic import (nimble.core.configs.base_yaml_parser -> nimble.core.entity.node_manager -> nimble.core.entity.nodes -> nimble.core.configs.component_attributes_config_parser) (cyclic-import)

***** Module nimble.actions.base.validation.urlcat.__init__

<http://192.168.135.184:8080/#/main/dashboard/metrics>

In test_csv_utils.py:

Error: TypeError: '<' not supported between instances of 'collections.OrderedDict' and 'collections.OrderedDict'

Before:

```
# assert sorted(self.unicode_safe_list(list_of_dicts)) ==
sorted(CsvUtils.parse_csv(self.file_))
```

After:

```
assertself.unicode_safe_list(list_of_dicts) == CsvUtils.parse_csv(self.file_)
```

In python2 ordereddict rearrange the output whereas in python3 ordereddict gives output in which order you insert the values so no sorted() required for python3.

Task Done Today (26-07-2019):

While searching for some securities issues in Python I came to know that python has some major security hole which are:

When we install any library from python (PyPi) a third-party library mostly our problem resolves but there is one big security issue that library can produce one of the major is it can make changes in your standard library or any other library used by you. In this way you opens the gate for hackers to hack your code or data.

Researched about it:

Firstly, we should check whether that library is official or not and have a license.

For more information about the solution or checks to be made before installing any third-party library refer to this link. (<https://hackernoon.com/10-common-security-gotchas-in-python-and-how-to-avoid-them-e19fbe265e03>)

Then searched about if we have already coded then how to find these vulnerabilities.

Found: Bandit is an open source python library which solves some of our above issues (not all only standard ones).

For more information on bandit refer to this link. (<https://pypi.org/project/bandit/>)

Steps to run bandit library on our st-automation project:

Step 1: pip install bandit (in virtual environment)

Step 2: command for running bandit on project :- `bandit -r st-automation -f html -o output.html`

Here: r -> indicates recursively

f -> project_folder

st-automation -> project_name

Html -> type of output file you want

Output.html -> output file (html)

Output File of Bandit:

Attached (in html format)

References:

JIRA and Jenkins

<https://www.youtube.com/watch?v=DktKQZVLhtE>

Jira and Jenkins with Webhooks

<https://www.youtube.com/watch?v=uhx3oDPOijo>

JIRA PLUGIN IN JENKINS

<https://wiki.jenkins.io/display/JENKINS/JIRA+Plugin>