Metrics:

Total lines of code: 78247
Total lines skipped (#nosec): 0

Skipped files:

./core/sawtooth/cli/admin_sub/permissioned_validator_registry.py **reason:** syntax error while parsing AST from file
./core/sawtooth/cli/monitor_lib/monitor_modules.py **reason:** syntax error while parsing AST from file
./core/sawtooth/cli/submit.py **reason:** syntax error while parsing AST from file
./extensions/arcade/sawtooth_battleship/battleship_board.py **reason:** syntax error while parsing AST from file
./extensions/arcade/sawtooth_battleship/battleship_cli.py **reason:** syntax error while parsing AST from file
./sdk/examples/intkey_jvm_sc/sawtooth_intkey/cli/generate.py **reason:** syntax error while parsing AST from file
./sdk/examples/intkey_jvm_sc/sawtooth_intkey/cli/load.py **reason:** syntax error while parsing AST from file

yaml_load: Use of unsafe yaml load. Allows instantiation of arbitrary objects. Consider yaml.safe_load().
Test ID: B506
Severity: MEDIUM
Confidence: HIGH
File: ./cli/build/lib/sawtooth_cli/cluster.py
More info: http://docs.openstack.org/developer/bandit/plugins/yaml_load.html

```
154             with open(file_name, 'r') as state_file:
155                 state = yaml.load(state_file)
156                 return state
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.
Test ID: B310
Severity: MEDIUM
Confidence: HIGH
File: ./cli/build/lib/sawtooth_cli/rest_client.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b310-urllib_urlopen

```
101             try:
102                 result = urllib.urlopen(url_or_request)
103                 return (result.status, json.loads(result.read().decode()))
```

yaml_load: Use of unsafe yaml load. Allows instantiation of arbitrary objects. Consider yaml.safe_load().
Test ID: B506
Severity: MEDIUM
Confidence: HIGH
File: ./cli/sawtooth_cli/cluster.py
More info: http://docs.openstack.org/developer/bandit/plugins/yaml_load.html

```
154             with open(file_name, 'r') as state_file:
155                 state = yaml.load(state_file)
156                 return state
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.
Test ID: B310
Severity: MEDIUM
Confidence: HIGH
File: ./cli/sawtooth_cli/rest_client.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b310-urllib_urlopen

```
101             try:
102                 result = urllib.urlopen(url_or_request)
103                 return (result.status, json.loads(result.read().decode()))
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.
Test ID: B310
Severity: MEDIUM
Confidence: HIGH
File: ./core/sawtooth/client.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b310-urllib_urlopen

```
181             try:
182                 request = urllib2.Request(url)
183                 request.get_method = lambda: 'HEAD'
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.
Test ID: B310
Severity: MEDIUM
Confidence: HIGH
File: ./core/sawtooth/client.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b310-urllib_urlopen

```
218             try:
219                 request = urllib2.Request(url)
220                 opener = urllib2.build_opener(self._proxy_handler)
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.
Test ID: B310
Severity: MEDIUM
Confidence: HIGH
File: ./core/sawtooth/client.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b310-urllib_urlopen

```
263             try:
264                 request = urllib2.Request(url, data,
265                                           {'Content-Type': 'application/cbor',
266                                            'Content-Length': datalen})
267
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.
Test ID: B310
Severity: MEDIUM
Confidence: HIGH
File: ./integration/sawtooth_integration/tests/test_intkey_smoke.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b310-urllib_urlopen

```
134         request = urllib.request.Request(url, data, headers)
135         response = urllib.request.urlopen(request).read().decode('utf-8')
136         return json.loads(response)
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.
Test ID: B310
Severity: MEDIUM
Confidence: HIGH
File: ./integration/sawtooth_integration/tests/test_two_families.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b310-urllib_urlopen

```
182         request = urllib.request.Request(url, data, headers)
183         response = urllib.request.urlopen(request).read().decode('utf-8')
184         return json.loads(response)
```

yaml_load: Use of unsafe yaml load. Allows instantiation of arbitrary objects. Consider yaml.safe_load().
Test ID: B506
Severity: MEDIUM
Confidence: HIGH
File: ./manage/sawtooth_manage/docker.py
More info: http://docs.openstack.org/developer/bandit/plugins/yaml_load.html

```
79              with open(state_file_path) as fd:
80                  state = yaml.load(fd)
81              return state
```

yaml_load: Use of unsafe yaml load. Allows instantiation of arbitrary objects. Consider yaml.safe_load().
Test ID: B506
Severity: MEDIUM
Confidence: HIGH
File: ./manage/sawtooth_manage/subproc.py
More info: http://docs.openstack.org/developer/bandit/plugins/yaml_load.html

```
63          def _load_state(self):
64              return yaml.load(open(self._state_file_path))
65
```

hardcoded_bind_all_interfaces: Possible binding to all interfaces.
Test ID: B104
Severity: MEDIUM
Confidence: MEDIUM
File: ./rest_api/build/lib/sawtooth_rest_api/rest_api.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_bind_all_interfaces.html

```
27                              help='The host for the api to run on',
28                              default="0.0.0.0")
29          parser.add_argument('--stream-url',
```

hardcoded_bind_all_interfaces: Possible binding to all interfaces.
Test ID: B104
Severity: MEDIUM
Confidence: MEDIUM
File: ./rest_api/sawtooth_rest_api/rest_api.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_bind_all_interfaces.html

```
27                              help='The host for the api to run on',
28                              default="0.0.0.0")
29          parser.add_argument('--stream-url',
```

yaml_load: Use of unsafe yaml load. Allows instantiation of arbitrary objects. Consider yaml.safe_load().
Test ID: B506
Severity: MEDIUM
Confidence: HIGH
File: ./sdk/examples/xo_python/sawtooth_xo/xo_client.py
More info: http://docs.openstack.org/developer/bandit/plugins/yaml_load.html

```
61              try:
62                  encoded_entries = yaml.load(result)["data"]
63
```

yaml_load: Use of unsafe yaml load. Allows instantiation of arbitrary objects. Consider yaml.safe_load().
Test ID: B506
Severity: MEDIUM
Confidence: HIGH
File: ./sdk/examples/xo_python/sawtooth_xo/xo_client.py
More info: http://docs.openstack.org/developer/bandit/plugins/yaml_load.html

```
76              try:
77                  return base64.b64decode(yaml.load(result)["data"])
78
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.
Test ID: B310
Severity: MEDIUM
Confidence: HIGH
File: ./sdk/examples/xo_python/sawtooth_xo/xo_client.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b310-urllib_urlopen

```
99              try:
100                 result = urllib.request.urlopen(request).read().decode()
101             except BaseException as err:
```

subprocess_popen_with_shell_equals_true: subprocess call with shell=True identified, security issue.
Test ID: B602
Severity: HIGH
Confidence: HIGH
File: ./sdk/python/build/lib/sawtooth_processor_test/tester.py
More info: http://docs.openstack.org/developer/bandit/plugins/subprocess_popen_with_shell_equals_true.html

```
86                  netstat = "netstat -lp | grep -e tcp"
87                  result = subprocess.check_output(netstat, shell=True).decode()
88                  LOGGER.info("\n`%s`", netstat)
```

subprocess_popen_with_shell_equals_true: subprocess call with shell=True identified, security issue.
Test ID: B602
Severity: HIGH
Confidence: HIGH
File: ./sdk/python/sawtooth_processor_test/tester.py
More info: http://docs.openstack.org/developer/bandit/plugins/subprocess_popen_with_shell_equals_true.html

```
86                  netstat = "netstat -lp | grep -e tcp"
87                  result = subprocess.check_output(netstat, shell=True).decode()
88                  LOGGER.info("\n`%s`", netstat)
```

blacklist: Pickle library appears to be in use, possible security issue.
Test ID: B301
Severity: MEDIUM
Confidence: HIGH
File: ./validator/build/lib/sawtooth_validator/database/lmdb_database.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b301-pickle

```
83                      if pickled is not None:
84                          return pickle.loads(pickled)
85
```

blacklist: Use of insecure MD2, MD4, or MD5 hash function.
Test ID: B303
Severity: MEDIUM
Confidence: HIGH
File: ./validator/build/lib/sawtooth_validator/journal/consensus/dev_mode/dev_mode_consensus.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b303-md5

```
132         def hash_signer_pubkey(signer_pubkey, header_signature):
133             m = hashlib.md5()
134             m.update(signer_pubkey)
```

blacklist: Pickle library appears to be in use, possible security issue.
Test ID: B301
Severity: MEDIUM
Confidence: HIGH
File: ./validator/sawtooth_validator/database/lmdb_database.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b301-pickle

```
83                      if pickled is not None:
84                          return pickle.loads(pickled)
85
```

blacklist: Use of insecure MD2, MD4, or MD5 hash function.
Test ID: B303
Severity: MEDIUM
Confidence: HIGH
File: ./validator/sawtooth_validator/journal/consensus/dev_mode/dev_mode_consensus.py
More info: http://docs.openstack.org/developer/bandit/blacklists/blacklist_calls.html#b303-md5

```
132         def hash_signer_pubkey(signer_pubkey, header_signature):
133             m = hashlib.md5()
134             m.update(signer_pubkey)
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM
File: ./validator/tests/unit3/test_config/tests.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_tmp_directory.html

```
53              try:
54                  os.environ['SAWTOOTH_HOME'] = '/tmp/no-such-sawtooth-home'
55
56                  config = load_path_config()
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM
File: ./validator/tests/unit3/test_config/tests.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_tmp_directory.html

```
57                  self.assertEqual(config.config_dir,
58                                   "/tmp/no-such-sawtooth-home/etc")
59                  self.assertEqual(config.key_dir,
60                                   "/tmp/no-such-sawtooth-home/keys")
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM

File: ./validator/tests/unit3/test_config/tests.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_tmp_directory.html

```
59                  self.assertEqual(config.key_dir,
60                                   "/tmp/no-such-sawtooth-home/keys")
61                  self.assertEqual(config.data_dir,
62                                   "/tmp/no-such-sawtooth-home/data")
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM
File: ./validator/tests/unit3/test_config/tests.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_tmp_directory.html

```
61                  self.assertEqual(config.data_dir,
62                                   "/tmp/no-such-sawtooth-home/data")
63                  self.assertEqual(config.log_dir,
64                                   "/tmp/no-such-sawtooth-home/logs")
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM
File: ./validator/tests/unit3/test_config/tests.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_tmp_directory.html

```
63                  self.assertEqual(config.log_dir,
64                                   "/tmp/no-such-sawtooth-home/logs")
65              finally:
66                  os.environ.clear()
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM
File: ./validator/tests/unit3/test_config/tests.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_tmp_directory.html

```
98                  self.assertEqual(config.key_dir,
99                                   "/tmp/no-such-dir-from-config/keys")
100                 self.assertEqual(config.data_dir,
101                                  "/tmp/no-such-dir-from-config/data")
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM
File: ./validator/tests/unit3/test_config/tests.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_tmp_directory.html

```
100                 self.assertEqual(config.data_dir,
101                                  "/tmp/no-such-dir-from-config/data")
102                 self.assertEqual(config.log_dir,
103                                  "/tmp/no-such-dir-from-config/logs")
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
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File: ./validator/tests/unit3/test_config/tests.py
More info: http://docs.openstack.org/developer/bandit/plugins/hardcoded_tmp_directory.html

```
102                 self.assertEqual(config.log_dir,
103                                  "/tmp/no-such-dir-from-config/logs")
104             finally:
105                 os.environ.clear()
```