Part 2 of the item cache change. Bosch team to follow up with Tim regarding this story.

Iotic made a commit to tidy-up the code in the sapequipmenthistory integrator. I would like all integrators to be consistent.

**- Port sapmasterdata/static\_tests.cmd to all integrators**

**🡪 done**

**- Decide on a development approach.  rrps\python\setup\_venv.cmd or port rrps/python/build\_deps.sh to cmd**

**🡪 decided-**

**- Run static\_tests.cmd for all integrators and fix the issues.**

  ^ NOTE!  If you see lots of CRLF warnings.  Please fix your editor to retain LF line endings!!

  \*\* I Will Reject Your Commits If You Change My Line Endings \*\*

* SAPEquipmentHistoryIntegrator
* rrps.dt.integrator.sapwarrantyrecall
* rrps.dt.integrator.talendtimdocument
* rrps.dt.integrator.talendfirmware

**- Create a rrps\python\static\_test\_all.cmd which runs the static tests for all rrps.\* packages.**

- **Check all setup.py files.**  Should have a comment like: "# Expecting rrps.dt.integrator to be namespace, particular integrators within" -- not rrps.dt.integrator.something.

**🡺 changed to all integrators.**

**- Check all README.md files.**

- - Make a new rrps/python/README.md with the 'Development / Testing' section for Linux & Windows.

**🡪 done. Pending for Linux.**

- - Remove 'Development / Testing' section from each integrators README.  (Removes duplication)

🡪 **done except sapmasterdata**

- - Add usage for:  rrps/python/setup\_venv.cmd (See root README)

**🡪 added**

- - Add some description of each integrator.

🡪

**- Check all integrator.cfg.yml files.**

- - Remove specific credentials.

🡪 **could not any credentials**

- - Check for copy & paste errors.  EG mention of 'field data' in sap integrators.  mention of 'sapmaster' etc

🡪 **not found**

- - If you find 'config.bomgar' at the top.  Change it to 'config.sap' (sapequipmenthistory has this already)

* rrps.dt.integrator.sapwarrantyrecall
* rrps.dt.integrator. sapbommasbuilt
* rrps.dt.integrator. sapmasterdata

**- Check all integrator impl.py**

- - Fix config.bomgar -> config.sap as per cfg change.

**🡪 sapbommasbuilt, sapmasterdata**

- - Add docstrings to file, class & functions

🡪 **pending**

**- - Fix the dev environment 'hacks' EG:**

- - - See sapequipmenthistory/impl.py for example of how it should be coded.

- - - sapmasterdata impl.py lines 99--102.  This code is not obvious.  Needs warning comment etc.

🡪

- - - sapbomasbuilt, sapwarrantyrecall, talendfirmware, talendtimdocument

🡪 **Done - in**

**- - Move mock data json files into data directory (see sapequipmenthistory)**

* rrps.dt.integrator.sapwarrantyrecall
* rrps.dt.integrator. sapbommasbuilt
* rrps.dt.integrator. sapmasterdata
* rrps.dt.integrator.talendtimdocument
* rrps.dt.integrator.talendfirmware

**sapbommasbuilt, sapmasterdata, talendfirmware, sapwarrantyrecall & telendtimdocument**

- - Add try/except around anything suspicous EG accessing keys on dicts from remote APIs

🡪 **pending**

**- - Change XXX\_FILTER stuff to use python format strings (Remember to change integrator.cfg.yml)**

* rrps.dt.integrator.sapwarrantyrecall - $$
* rrps.dt.integrator.talendtimdocument - $$$
* rrps.dt.integrator.talendfirmware

- - Change config loading to use NestedConfig & namedtuple.  (see sapequipmenthistory)

* rrps.dt.integrator.sapwarrantyrecall
* rrps.dt.integrator.talendtimdocument
* rrps.dt.integrator.talendfirmware