

# *Verify Pairs Ingestor User's Manual*

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## 1.0 Overview

The Verify Pairs Ingestor is a tool that inserts records into the vfpairs table (never the vfyprocpairs table) based on pairs provided in a properly formatted pairs file. Each pair is inserted one-at-a-time, and for a pair to be inserted, it must have a corresponding verification location defined within the vfyruninfo table. An option can be specified instructing the software to create vfyruninfo table entries as needed.

## 2.0 Execution

To execute the Verify Pairs Ingestor, enter:

```
cd $(get_apps_defaults vsys_scripts)
ingestpairs [-i] [-p] <file1> <file2> ... <fileN>
```

where <file1>, <file2>, ..., <fileN> are properly formatted pairs files with a format described in the *IVP Batch Program User's Manual for Verification*. The file names can be specified as a complete path (if they begin with a '/'), relative to the current directory (if they begins with a '.'), or relative to the directory corresponding to apps-defaults token vsys\_output.

If `-i` is specified, then when a pair is inserted but no vfyruninfo table entry exists, it will attempt to create a new entry corresponding to that record: the location id and SHEF code will be drawn from the pair. Furthermore, it will assume that there are no sensor preferences, the location is not active, the location is not national, and the response time is MEDIUM.

If `-p` is specified, then the pairs will be inserted into the vfyprocpairs table instead of the vfpairs table.

*NOTE: The user must properly setup the vfyruninfo table within the archive database using the Vfyruninfo Editor before executing the Verify Pairs Ingestor, unless the `-i` option is used. See Section 4.0.*

## 3.0 Recommended Apps-defaults Tokens

The following apps-defaults tokens are used by the Verify Pairs Ingestor:

- adb\_name : <depends upon RFC>
- util\_rls : \$(util\_dir)/bin/RELEASE
- vsys\_dir : \$(verify\_dir)
- vsys\_output : \$(vsys\_dir)/output
- rax\_pghost : ax <optional; if not present, it uses the PGHOST environment variable>
- pguser : pguser <optional; if not present, it uses the PGUSER environment variable>
- pgport : 5432 <optional; if not present, it uses the PGPORT environment variable>

Upon execution, if apps-defaults token `vsys_output` is undefined, it is assumed that all pairs files are located relative to the current working directory. Otherwise, it is assumed that all pairs files are in the directory corresponding to `vsys_output`. This directory is used because pairs files are generated as output by the IVP Batch Program, so if you need to ingest a pairs file generated by the IVP Batch Program, for some reason, this is the directory where it will be found.

## ***4.0 Instructions for Ingesting Pairs Data***

To transfer forecast-observed data pairs from a source outside of the verification software suite, do the following:

1. Create a pairs file of the same format as that described in the *IVP Batch Program User's Manual for Verification*, Section 14.2. This may require making up the location id and SHEF code for the data type. Try to choose appropriate values for the fields in the pairs file, where possible, particularly the SHEF codes. The quality code field (the last on each line) is ignored; every pair inserted into the `vfypairs` table is assumed to be 'good', having a default quality code value of 1879048191 (why would anyone want to ingest pairs that are not be part of the verification analysis?).
2. Either (a) create entries in the `vfyrinfo` table via the *Vfyrinfo Editor* for each location for which pairs are to be ingested (see the *Vfyrinfo Editor User's Manual*) or (b) use the `-i` flag when running the `ingestpairs` script in the next step in order to add `vfyrinfo` table entries as needed.
3. Execute the Verify Pairs Ingestor, as in Section 3.0, passing in the file created in Step 1 and arguments as desired.

Be sure to remember the location ids and SHEF codes from Step 1, as these will be important in entering the new `vfyrinfo` table entry in Step 2 and identifying the ingested pairs for use in the IVP and IVP Batch Program.

*NOTE: If pairs are to be ingested for both persistence (those with a forecast type source of 'FR') and corresponding non-persistence forecasts, and the location does not already exist in the `vfyrinfo` table, then be sure to put the non-persistence forecasts before the persistence forecasts in the pairs file. This will make it so that the persistence forecast location is not added to the `vfyrinfo` table. Persistence forecast verification locations are assumed to exist for non-persistence verification locations, so it is redundant (and can cause problems) to have them in the `vfyrinfo` table.*