



Version 5.x

Migration of Reporting Data from
FACTORY FRAMEWORK to FORCAM FORCETM

Product Description



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Migration of Reporting Data.docx



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Purpose

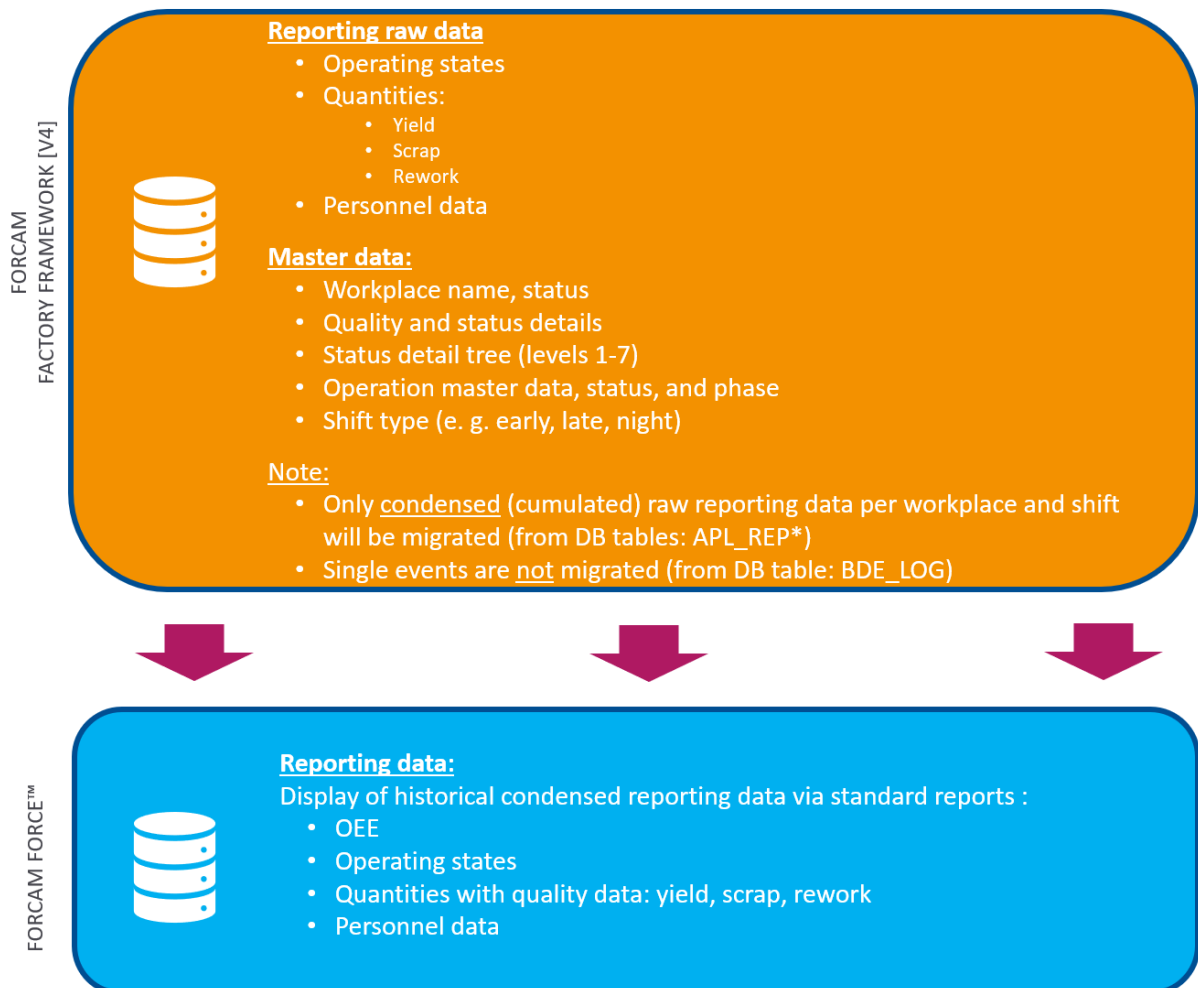
FORCAM FORCE™ is undergoing the conversion of the former FORCAM solution FACTORY FRAMEWORK (V4) to the new IIoT platform solution FORCAM FORCE™. As part of this project, FORCAM also offers an optional migration of reporting data.

This has the advantage that the customer can use only the FORCAM FORCE™ solution to display historical V4 reporting data and it is no longer necessary to maintain the old FACTORY FRAMEWORK solution.

What is Migrated?

Only the condensed raw data of V4 reporting is migrated to FORCAM FORCE™, including the required master data. This master data includes workplace name, workplace status, quality details, status details, status detail tree (levels 1-7), operation status, operation phase, and shift types.

The following overview shows the relevant reporting objects that are migrated:



How is Migration Done?

Overview

The migration is carried out with a migration tool developed by FORCAM, which transfers the required reporting master data and raw data from the V4 database to the FORCAM FORCE™ database.

Configuration options

Migration in phases

Both the selection of workplaces and the time period of the migration can be set in the migration tool. This makes it possible to perform the migration in phases, for example, to distribute the load of the migration (e.g. on the database) to a time where the migration can take place during production-free periods.

Master data mapping

Sometimes it may be necessary to make translations/transmissions between workplace names, workplace status, operation status and operation phases. This means to map them respectively from the V4 system to FORCAM FORCE™. As an example, this option is used in the following cases:

- Renaming workplaces: A workplace in V4 can be renamed during migration to a new name in FORCAM FORCE™.
- Harmonizing operating states: During the migration, for example, two operating states in V4 (technical and logistic fault) are to be mapped to one operating state in accordance with FORCAM FORCE™ (fault).

Data migration process

Technical

The basic technical process of data migration of a workplace is outlined as follows:

1. Automatic creation of the workplace to be migrated into FORCAM FORCE™, which exists in the V4 system but has not yet been created in FORCAM FORCE manually before that.
2. The condensed raw reporting data of the workplace to be migrated is read from the V4 reporting data tables:
 - APL_REPSCHICHT_AFO_BA
 - APL_REPSCHICHT_AFO_AUS
 - APL_REPSCHICHT_AFO_NACH
 - APL_REPSCHICHT_BA
 - APL_REPSCHICHT_AFO_PNR
3. Automatic creation of non-existing workplace status, workplace phase, quality details, shifts, shift type etc. in FORCAM FORCE™, which exist in V4 but have not already been manually created in FORCAM FORCE™.
4. Writing the reporting data into the corresponding condensed reporting data tables in FORCAM FORCE™.

Organizational (use case)

The following organizational process of data migration has been established as a use case:

1. Determining the workplace status, workplace phase, quality details and status details etc. from V4 and mapping to the respective status, phases, details, etc. in FORCAM FORCE™. This step is carried out together with the FORCAM professional service team.
2. Configuration of a limited number of workplaces and definition of a reasonable time range (e.g. one quarter).
3. Carrying out the migration for these workplaces and this time range.
4. Validating the migration by comparing the standard reports in V4 and FORCAM FORCE™.
5. if necessary, adjustments are made to the mapping of status, phase and details, and the migration is repeated.
6. final migration for the remaining workplaces in defined time ranges.

Usable FORCAM FORCE™ reports

As a result of the data migration, the following reports are usable in FORCAM FORCE™ for the historical V4 data (provided the respective raw data is available in the V4 system):

- OEE Report (Workplace)
- OEE Development (Workplace)
- OPE (Overall view)
- Operating state report (Workplace)
- Operating state history (Workplace)
- State class report (Workplace)
- State class development (Workplace)
- Hitlist operating states (Workplace)
- Hit development report (Workplace)
- Hit development (Workplace)
- Quality report (Workplace)
- Quality details (Workplace)
- Quality development (Workplace)
- Hitlist quality details (Workplace)


- State class report (Material)
- State class development (Material)
- Operating state report (Material)
- Operating state development (Material)
- Hitlist operating states (Material)
- Quality report (Material)
- Quality details (Material)
- Quality development (Material)
- Hitlist quality details (Material)

- State class report (Order)
- Operating state report (Order)
- Hitlist operating states (Order)

- OEE-Report (Process)
- State class report (Process)
- Operating state report (Process)
- Hitlist operating states (Process)
- Performance report (Process)
- Quality details (Development per pro Material)
- Quality report (Process)
- Quality details (Process)
- Hitlist quality details (Process)

Basic Conditions

- FACTORY FRAMEWORK (V4) System version ≥ 4.16
- Existing database link from the target database (= FORCAM FORCE™ database) to the source database (= V4 database)
- A data migration is generally possible while V4 and FORCAM FORCE™ are running

 **Note:** The migration creates a higher load on the databases (source and target) which may indirectly affect the performance of V4/FORCAM FORCE™.