OPPID- DGN, Database Guid and Keytag Storage and Usage

**Document Type:** TechNote

**Product(s):** OpenPlant PowerPID

**Version(s):** Selectseries 3+

**Original Author:** Steve Morrow

### Description

This document will explain how the GUID value is used and matched with Database GUID values for synchronization.

# Terminology

**Guid**

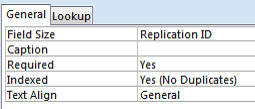
A unique value that is stored on component ECInstances.

**Keytag**

APFW Database unique key

# GUID database storage

* The **KEYTAG\_GUID\_PK** is an auto-generated field (and like columns)



This means this field gets a “GUID” type value for every new record: TAG\_REG, EQUIP EQP\_LNK,…

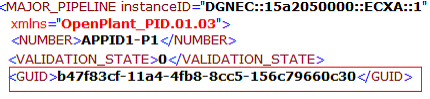
* OPPID uses the **Tag Registry** table for storing the DGN defined GUID. If the class does not have a Tag Registry table, it is stored in the Source table.
  + TAG\_REG
  + INSTR
  + PIPE\_RUN
  + PID\_TOFR
* When a component is placed in OPPID
  + A Unique GUID is a assigned to the EC GUID Property.
  + A Sync to database writes this property value to the database
  + This Creates a “unique” match between Drawing Instance and database record
* The GUID in the Source tables is NOT USED where the component has a tag storage table.

List of source tables where the GUID is present but not used.

* + PROCESS
  + VALVE
  + EQUIP
  + …

**To check this**

1. place a component (Pipeline)
2. sync to database
3. Select Pipeline
4. Dump (pid component dump)
   1. View the “GUID” value
5. View the TAG \_REG table and find the **KEYTAG\_GUID\_PK** column
   1. The values are not case sensitive



| **TAG\_REG** |
| --- |
| **KEYTAG\_GUID\_PK** |
| {B47F83CF-11A4-4FB8-8CC5-156C79660C30} |

# PSV Keytag Storage

* PSV are data change components
  + Their foreign key values are stored in the **RUN\_CONN** table
    - It is possible that the pipe runs have their own Pipeline

| **INSTR** | |
| --- | --- |
| **KEYTAG** | **TAG\_TYPE** |
| 0000000605 | AT\_PSV |

| **RUN\_CONN** | |
| --- | --- |
| **KEYTAG** | **RUN\_ID** |
| 0000000605 | 0000000603 |
| 0000000605 | 0000000604 |

| **PIPE\_RUN** | |
| --- | --- |
| **KEYTAG** | **LINE\_ID** |
| 0000000603 | 0000000602 |
| 0000000604 | 0000000602 |

* Mapping in PlantProjectSchema.01.02\_Autoplant\_PIW.01.02.mapping.xml
  + Search <Column name="RUN\_CONN.RUN\_ID" />
    - This will show all relationships that use the **RUN\_CONN** table

### PLANT\_KEY

* PLANT\_KEY column stores the Pipeline KEYTAG
* Types that use **PLANT\_KEY** column
  + Instrument Bubbles
  + Flow Elements
  + Control Valves
* Mapping in PlantProjectSchema.01.02\_Autoplant\_PIW.01.02.mapping.xml
  + Search <Column name="INSTR.PLANT\_KEY" />
    - This will show all relationships that use **PLANT\_KEY**