

Paper for Consideration by TSMAD TSM2

[Review of S-100 Registry and FCD]

Submitted by:	Republic of Korea (KHOA)
Executive Summary:	To describe the structure of FCB tables identified during the development of Feature Catalogue Builder and areas of improvement.
Related Documents:	S-100, S-99, S-100 System Test Flow Diagram
Related Projects:	IHO S-100/S-101 Test Bed Project

Introduction / Background

ROK has been tasked by the IHO to develop Feature Catalogue Builder. It is currently revising S-101 Feature Catalogue using the database data of S-100 Registry FCD (Feature Concept Dictionary) Register. FCD Database of S-100 Registry is considered as the backbone of the implementation of S-100/S-101 Test Bed. This paper aims to introduce the structure of S-100 Registry FCD database identified by ROK during its S-101 Feature Catalogue production work and to discuss areas of improvement.

Analysis/Discussion

For the work on S-101 Feature Catalogue, FCD Database and Catalogue Database are used. FCD Database consists of tables of “Simple Attribute”, “Complex Attribute”, “Information Type”, and “Feature Type” – base data used for the creation of S-101 Feature Catalogue while Catalogue Database is a storage for created Feature Catalogues.

FCD Database originally consisted of a total of 20 tables as shown in Figure 1. In the initiative of S-101 Feature Catalogue production, the requirement that five (5) new tables were required was identified.

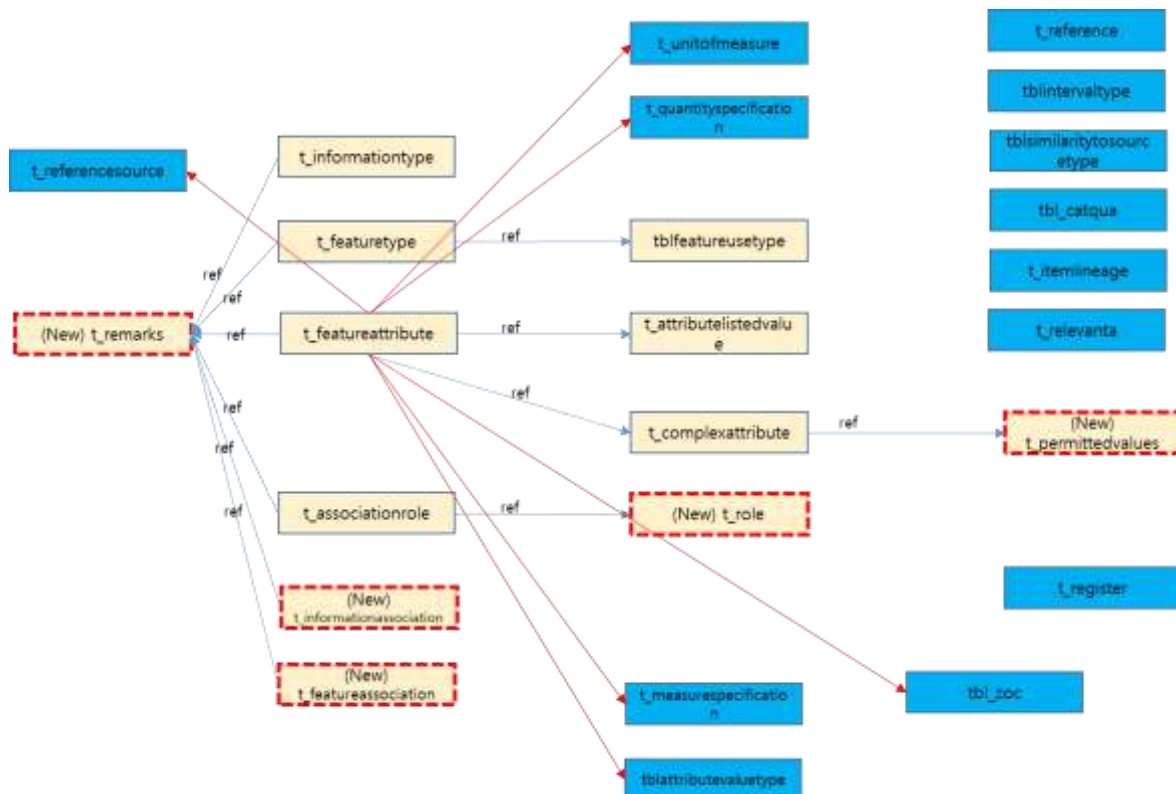


Fig. 1. Table Relationship in the FCD Database of S-100 Registry

The names and purposes of the newly added tables are as follows:

- t_informationassociation: a table to store the information on the binding relationship when conducting Information binding
- t_featureassociation: a table to store the information on the binding relationship when conducting Feature binding.

- t_role: a table to store the information on roles included in association
- t_permittedvalues: a table to store Permitted Values of Simple Attributes included in Complex Attributes
- t_remarks: a table to store multiple remarks

The blue line in Figure 1 indicates that the ROK research team has already identified the table relationship. The red line means the table relationship has not been understood by ROK team yet. In addition, tables in blue box are those not currently used in the production of S-101 Feature Catalogue. Discussion will be needed on how to use these tables.

On the other hand, Catalogue Database is where the produced S-101 Feature Catalogues are stored for the reuse or registration purposes. Its table relationship is shown in Figure 2. Its structure is simpler than that of FCD Database. Once discussion on FCD Database is concluded, the structure of Catalogue Database will need to be discussed.

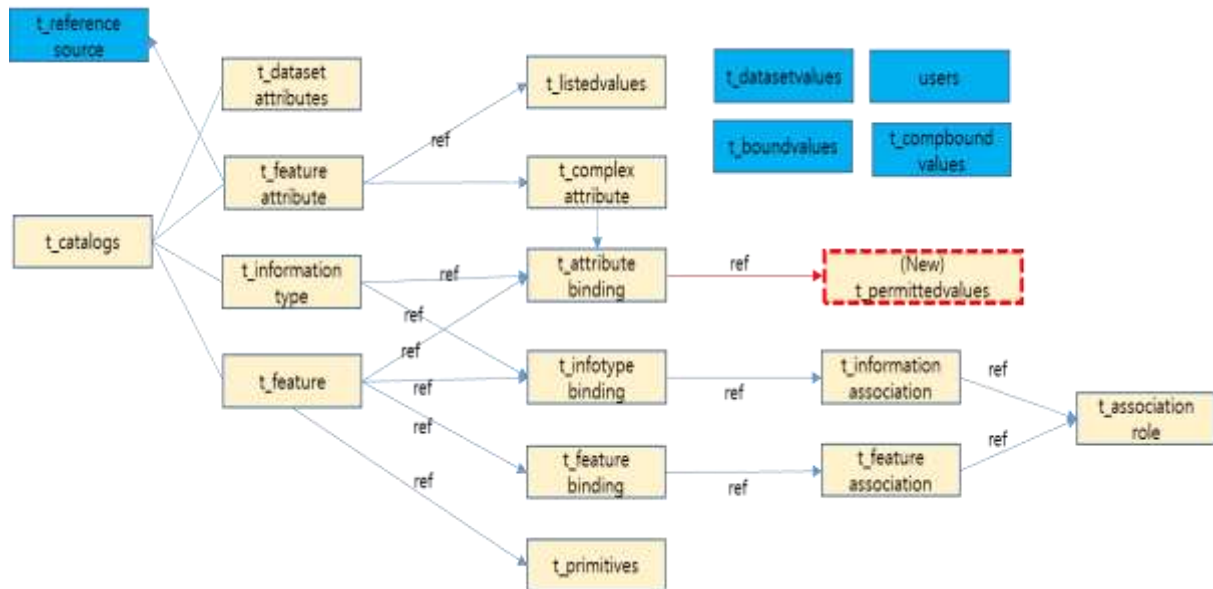


Fig. 2 Table Relationship in the Catalogue Database of S-100 Registry

During the S-101 Feature Catalogue production process, ROK improved each table included in FCD Database. At this stage, it's assumed that it's difficult to connect the revised FCD Database to the S-100 Registry website. It is expected that during the future S-10X Feature Catalogue work, solutions will need to be identified to link FCD Database with the S-100 Registry website to ensure validated, convenient input into FCD Database rather than manual input. Detailed issues regarding FCD Database will be discussed at TSMAD TSM2.

Action Required of TSMAD TSM

The TSMAD TSM is invited to:

- take note of this initiative;
- discuss what to do with the tables not used in FCD Database of S-100 Registry;
- discuss how to link FCD Database with the S-100 Registry website.