



AO Foundation - Release Notice (V5R2M0)

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Metadata Import Functions

The various routines enabling the metadata import have been enhanced to support additional variations used in the definition and creation of all file types.

Also a number of issues occuring in specific metadata combinations have been corrected to eliminate errors.

Source Creation to Non-Default Locations

In cases where source was created into a non-default location the DDS and DDL source locations were swapped when the source was created and therefore caused the object re-create to fail. This has now been corrected.

"Long Names" failure to Compile

The compilation of DDS physical and logical files failed to compile when the "Long Name" or ALIAS exceeded 30 characters in length.

To standardize the usage as well as to fix the proplem the length of the "Long Name" in AO has been reduced from 50 characters to 30 characters for both the DDS and DDL files.

Workbench Incorrect "Blue" Entries

Blue colored entries on the WorkBench lists indicate uncreated files or errors during creation.

The list entries of formats greater than one for DDS Joins, DDS Multi-Formats and DDL Views were showing as blue even though there was nothing wrong with the file (object).

This is now corrected BUT requires that a file with this problem needs to be re-imported to correct the metadata. Thereafter no further problems of this sort will occur.

> Single File Cross-Check Failure

The single file cross-check for DDS files was failing when the CHECK(xx) keyword had been used to create or re-create the file. AO has now been corrected to recognize this keyword and handle it correctly.

Workbench Filter not Working

The *SQL choice for the "File Type" entry on the workbench filter for physical files/tables has been removed. The *SQL value represented an SQLIND value of '2', which was removed from the file a number of releases ago.

If records are found on AOF110F for files where the SQLIND is still '2', this can be corrected by simply re-importing the indicated files back into AO.

Dictionary Validation Rules

The first of four components has been added to the dictionary providing the ability to log validation rules into the system for specific "Master" data elements. These rules for the element should be specific to the "business" usage of the element and not have any file specific conotations. The next component will provide for the file/field specific validation rules to be defined at record level.

Additional validation rules will be added to the function in future releases.

The documentation for the "AO Dictionary" functionality can be found at;

https://wiki.tembotechlab.com/AO/AO Dictionary#Dictionary Setup.





Record Element Change (WBM170WRK)

Two enhancements have been added to the "Change Record Elements" function in the work-bench, as follows:

- 1. When adding new dictionary elements to a record only the "Master" elements are initially displayed in the selection list. The function key F10 is provided to toggle the list between the "Master" and the "Unassigned" elements. As in previous releases, the "Dependant" elements are not displayed and therefore not selectable.
- 2. When changing details in a record element (WBM170CHG), the alternate name field is now provided with an F4=Select option which displays all available alternate names defined in th dictionary and allows for the most appropriate one to be selected.

License Expiry Warning

A new function has been added to start warning users that the license will expire. The warning will be issued to the first user to log on for the day and will commence 45 days before the expiry date of the license.

> I/O Server Templates

We will soon be uploading standardized I/O Server templates to http://www.ile-rpg.org/open-source.html, which can be used freely, subject to the terms of the Open Source license.

Standardized "trigger" templates are already available in this area together with the full set of Error Handling (percolation) procedures, used by the triggers and the I/O Servers.

Central Metadata Repository (AO Database)

The AO Database, which includes the AO Dictionary, will act as the custodian of ALL data integrity rules. These rules will be of 3 types and stored in the AO Database as follows;

- 1. Business Element rules, stored in the AO Dictionary. This is included in this release (See Dictionary Validation Rules).
- 2. File context rules, stored in the file definitions component of the AO Database (CMR).
- 3. Custom rules, stored in the AO Source Repository.

Those developers and companies who have attended our Advanced Modernization Workshops globally since 2012, are familiar with the AO modernization roadmap and the architectural objective of absolute data centricity.

Fundamental to that approach is that ALL data integrity (data validations and all entity relationships) are "owned" by the database. This will be defined and linked in the Central Metadata Repository, which means you will eventually have single instance definition of ANY rule and hence, single instance change.

Due to the gradual, non-disruptive approach we recommend, few of our technology adopters were ready to implement this initially, as they simply had so much work to reduce the duplication and inconsistencies in their metadata. Many are now ready to take the next step, moving their data integrity rules out of their code into the database engine, to establish authentic data centricity.

As a result, we will now RAPIDLY roll the required functionality out, in order to increase the velocity and momentum of all our client modernization projects, where AO is a fundamental component. The foundational components are in this release, with the balance of the initial tranche of new features to be shipped in the next release (current plan for shipment 4th Quarter 2017).

In preparation for this it is important that you become absolutely familiar with the approach we have been recommending since announcing AO, which is described in "Pulling the (DB2) Trigger (Without shooting yourself in the foot), which can be found at http://www.ile-rpg.org/open-source.html

The 3 rule sources, described above, will be converted into procedures and bound into a set of service programs(*SRVPGM). These procedures will then be used by the AO Trigger and I/O Server generators to create Triggers and I/O Servers which will be very similar in look and function to the templates referred to above.

These procedures, generated by AO will then also be available for selective consumption by any UI/UX to improve usability and experience for the user.