migFx EBS

– migrating into Oracle eBusiness Suite

This note highlights key features of migFx EBS - an extension of migFx to make data migration into Oracle EBS from any legacy system much faster, cheaper and better.

Focus is on application of the migFx generic bridge framework to Oracle EBS as the target system.

For information about migFx Bridge in general or as background information to this article please see migFx Bridge.

Introduction

The migFx EBS Bridge – or migFx EBS for short - is created to apply migFx rich functionality to Oracle EBS for use when migrating data from any legacy system or previous version.

Out of the box migFx EBS contains a migFx Target Map for Oracle EBS as well as the functionality needed to insert data correctly in Oracle EBS using Standard Oracle API's.

With our migFx EBS solution you get most of the code and control features you need - and hence a head start on your Oracle EBS data migration.

Recap of dataflow in migFx

Not to repeat information elsewhere (you can read about this elsewhere on www.hopp.tech) it might be useful to mention a few things about how migFx manages the dataflow in order to position migFx EBS correctly.

Just as a reminder recall that:

- Legacy Source System data are mapped into migFx using the separate Source Map functionality in migFx

- The Source System is matched to Oracle EBS Target Map through the migFx EBS Target Interface

- The migFx EBS Target Map pulls definitions from Oracle EBS through the Valueset Provider and deliver Oracle EBS data compliant with the established definitions

- The API Packages then create The Target System Objects and inserts them in to Oracle EBS

- Error messages are fed back from Oracle EBS to migFx to ease error tracking

This coherent execution flow will improve the quality of the end to end flow by resolving dependencies and identify any issues before or when insertion into Oracle EBS is attempted. Issues are returned to

migFx, flagged and can be dealt with in a structured and supported way before another attempt is made.

migFx Bridge applied to Oracle EBS

From migFx there are standardised extensions used as part of a bridge to any target system as described in more details in our note on the generic [migFx Bridge](#).

The sort version is, that any bridge like the migFx EBS is a collection of features specifically developed to be able to deliver a fully workable end to end data migration solution out of the box.

The migFx EBS solution comes with an EBS Target Map that contains all the mapping (structures, rules and validations) and delivery mechanism needed to deliver high quality data directly into Oracle EBS - no need to code anything yourself.

migFx EBS contains the functionality to create EBS data structures that meet the requirements in Oracle EBS.

It is important to remember that migFx EBS creates and hold the target data for each business object as an xml element. This element contains the child business object hierarchy – each business object in the hierarchy contains all target data for this object – like a customer with its addresses, account with entries or project with task etc. Objects are mapped as single entities, validated and process across the data migration flow a one unit.

EBS Providers

The generic migFx Bridge contains the elements that are needed to integrate with the given Oracle EBS. A migFx EBS Bridge contain a Target Map and a set of Extensions - here called Providers.

migFx EBS Target Map

migFx EBS make use of the migFx Target Map to structure the logical business entities as business objects the different Oracle modules.

It contains the validation and rules needed to ensure the only high quality and consistent date are passed on to Oracle EBS.

We deliver a full target map for Oracle EBS so your project can focus on applying and extending it not starting from scratch.

The Oracle EBS target map is setup in a way that is easily understood by any Oracle EBS business consultant should modifications or extensions be needed.

Metadata Provider

The migFx EBS metadata provider ensure that any changes to tables or API requirements are made visible to the target map. Validation ensure that the new or changing metadata definitions raise a flag in migFx EBS and action can be taken.

Valueset Provider

In most Oracle EBS data migrations, it's important to validate against or enrich data with data already in Oracle EBS.

The migFx EBS Valueset Provider pulls data as value sets from Oracle EBS and make them available for use in rules and validations in migFx EBS.

Let's look at what the different bridge elements do and how they are positioned in migFx EBS as illustrated in the Figure 1 below.

Figure 1. migFx EBS Components
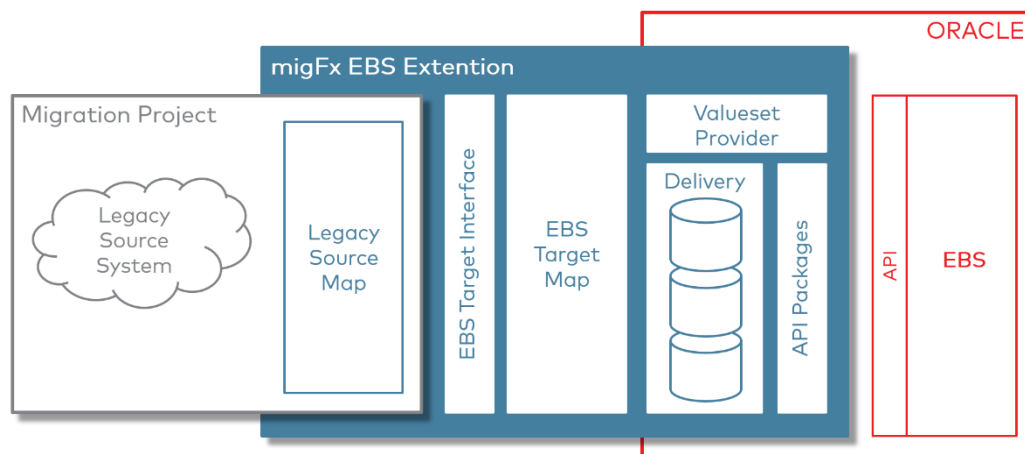
Starting with the generic migFx Bridge framework it is straight forward to apply it to Oracle through the EBS Providers and Delivery mechanism.

Delivery Provider

migFx EBS deliver data to Oracle EBS through a well-defined Delivery mechanism. It stages the target data and insert them into Oracle EBS object by object maintain the business integrity created in migFx. The flow runs as follows.

- migFx complete an iteration of the migration, it outputs a csv file per business object

- Each csv file is used as an external table in Oracle EBS, i.e. it can be queried using SQL as if it was a table

- A request set is run which processes each of these no source files in turn

- The source files are then copied to staging tables, which have the same columns as the files

- An API for that object is then called, using the columns of the staging table as parameters

In every subsequent iteration, for each row, every column of the source file is compared with the corresponding column in the staging table.

If there is even one difference or the row doesn't exist in the source file, the object is deleted from Oracle using the delete API, and the corresponding row from the staging table is also deleted.

This results in that each row being re-copied from the source file, and therefore re-created correctly in Oracle EBS.

This way, after every iteration, the objects in Oracle EBS correspond exactly to the source files.

Testing the delivery

Testing using migFx EBS can to a large extent be done without loading data onto Oracle EBS. How?

Iterations can be done multiple times in migFx EBS without using Oracle EBS to test. As migFx hold the source data, Valuesets and the target map data can be processed in full or any part to test and verify that data passed through migFx EBS meets all requirements and are consistent.

When data are ready migFx EBS, they will be pass as objects on to migFx EBS

Delivery mechanism who insert the data correctly into Oracle EBS.

A secondary user test can be done in Oracle EBS to finally ensure quality are as expected for a given test phase or signoff.

What runs where?

migFx is always installed on a windows platform using SQL Server. The migFx Extension is sitting across the Microsoft platform and the Oracle platform with the EBS Target Map and EBS Interface on the Microsoft side and the Valueset provider, Delivery and API Package on the Oracle side.

Target System objects covered

The Target System objects that can be created by migFx EBS cover all of Oracle EBS. We have a prototype available to demo (which has Project Headers, Tasks, Customers, and Key Members implemented) and we would be happy to extend it to cover any Objects in Oracle EBS.

Depending on the projects scope - all or some of these objects will be included. The Target System Objects covered by migFx EBS are shown in table 1 below.

Table 1: Target System Objects Covered by CORE migFx EBS

Sysadmin	Projects	AR
Users Responsibilities Profile Options Menus Functions Request Groups Request Sets Value Sets Lookups	Templates Project Headers Classifications Key Members Tasks Customers Agreements Fundings Financial Plans Events Transactions	Customers Customer Sites Customer Contacts Invoices
AP	**HR**	**PO**
Banks Bank Branches Suppliers Supplier Sites Supplier Contacts Employee Suppliers Employee Supplier Sites Employee Supplier Contacts Employee Supplier Banks Invoices	Employees Employee Assignments Contacts Addresses Organisations Locations Jobs Phones	Purchase Orders Purchase Order Receipts Requisitions