



SUNPOWER®

SunPower uses Triniti's Application Object Migrator to automate Object Migration process Seamlessly across various Environments (UAT, PROD etc.)



About SunPower

With nearly 3 decades of solar leadership, since 1985, SunPower has been leading global solar innovation. SunPower solar panels consistently deliver more energy and long-term peace of mind with the highest performing solar power systems available. SunPower is the solar energy choice of more homeowners and businesses around the world. Some quick facts about the organization are:-

- Global headquarters based in Silicon Valley since 1985
- Diversified global portfolio leading residential, commercial and utility solar energy markets
- World's highest efficiency solar panels featuring SunPower Maxeon cell technology
- More than 200 patents for solar technology

Existing Process of Object migrations

SunPower did not have any formal or full proof process to ensure Successful Migrations, Measures and metrics, Version Control, Auditing of changes, Release Management, Environment Synchronization and Patch Management. Developers had to prepare ITSCN document with all the migration steps and the same was shared with DBAs along with the objects list for execution of objects migration. DBAs followed the migration document and executed the steps manually in the required instance and shared the results with the Developer. Developers had to follow up with DBAs and IT managers for approvals and the migration to take place. In this process there was no centralized repository where in objects could be checked in.



Business Challenges

Major issues with the above process were:

- As the process was manual, code propagation was error-prone .
- There was chance of increased cost of migration, validation and testing.
- Lack of automation resulted in increased governance efforts.
- As there was no centralized repository for code, there was no single-source-of-truth for code base.
- Non repeatable and inconsistent migration process.
- Reporting was manual in case of any failure in the object migration.
- A lot of time was being spent along each manual step – from waiting for approvals to auditing.



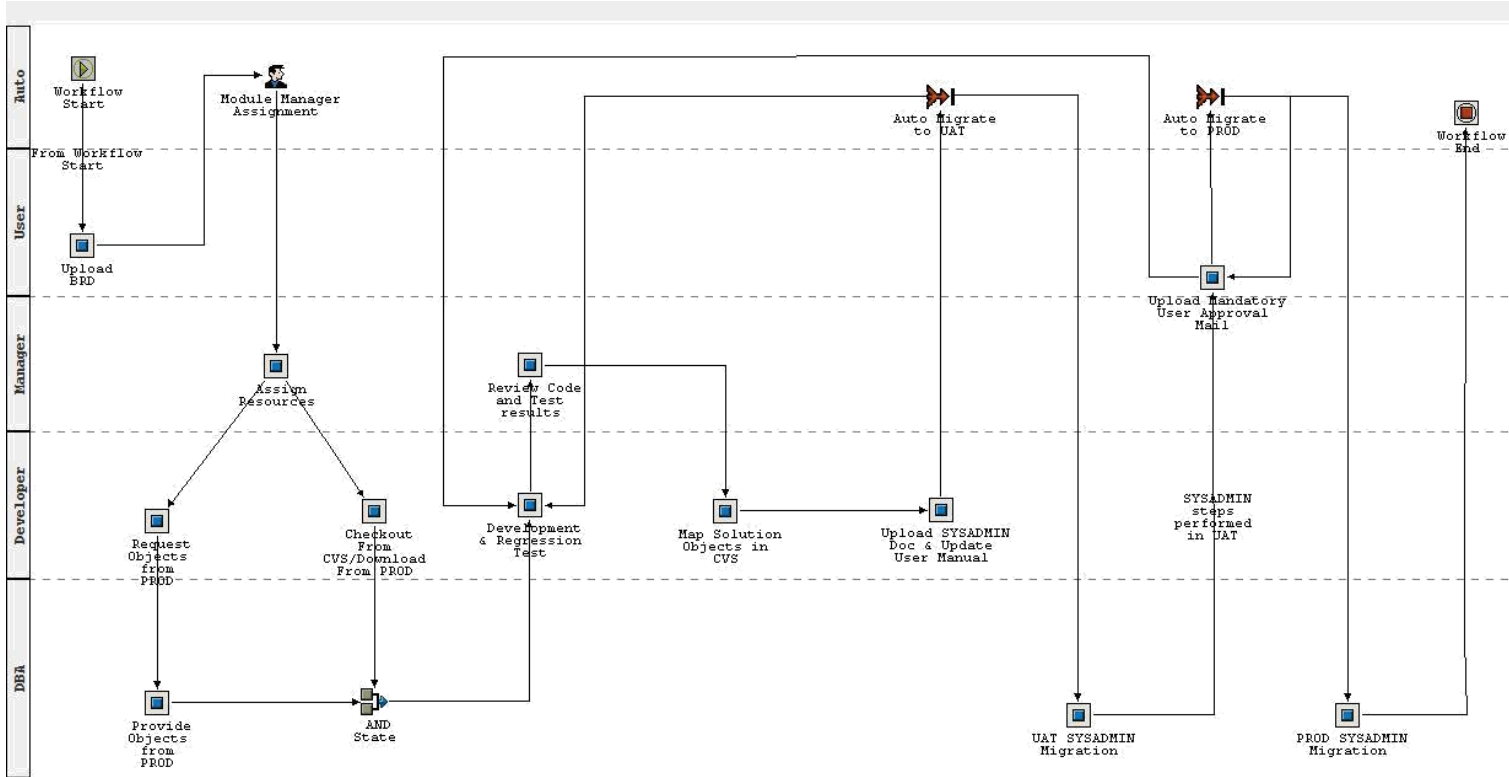
Triniti Solution

With the successful implementation of Triniti's Automated Object Migration (AOM) software ITSCN documents are no longer required as object migration happens automatically based on pre-defined workflows. Tool follows up on action required with the approvers. Developers get acknowledgement e-mail when their migration requests are progressing in the workflow. Even migrations can be queued / scheduled to run on weekends avoiding irregular PROD instance downtimes. Introduction of centralized repository, SVN ensured single source of truth for new source codes. Detailed audit on migrations is now also available with Triniti AOM software.

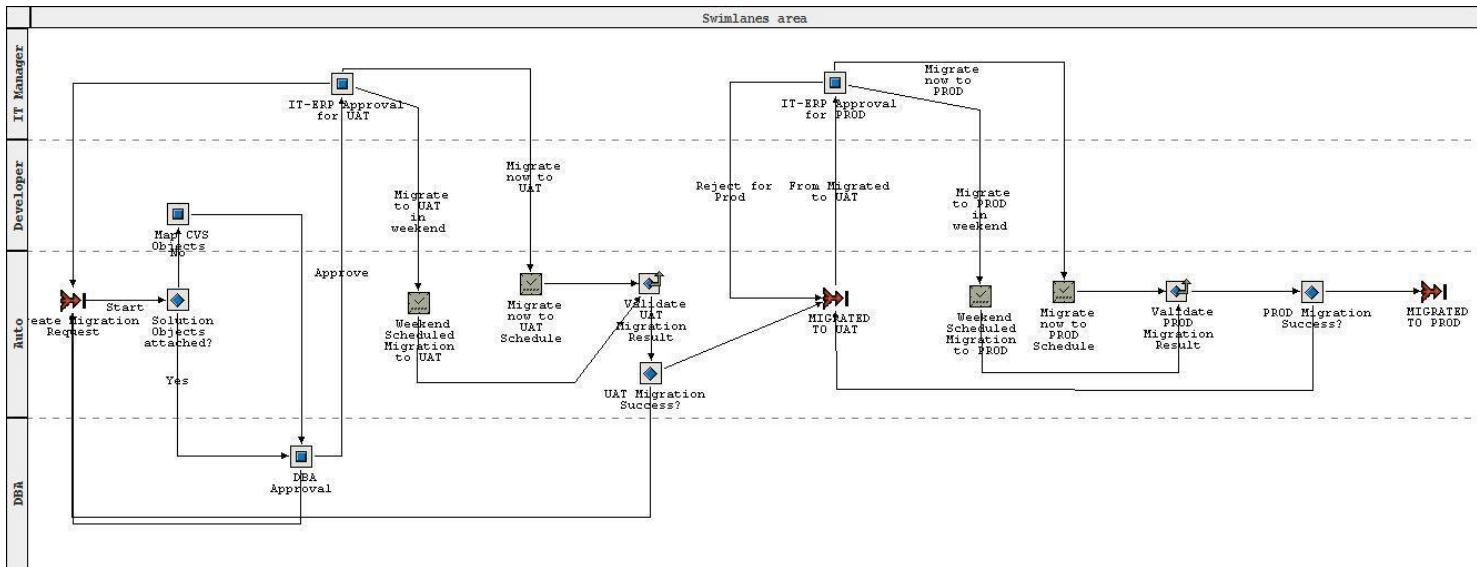
Process Flows

Entire object migration process was mapped into Tri2 AOM tool and was implemented at SunPower. Some of the implemented processes are depicted here.

The below process starts with creation of a ticket for migration, mapping the objects from the repository to the ticket after development and review of the code, tool will be sending the approval notifications to the approvers as per the configuration, once approval is done all the objects mapped to the ticket will be migrated to UAT instance, once user starts testing on UAT instance and confirms then again tool will be sending approval notifications to migrate objects to PROD instance, once approved all the objects will be migrated to PROD instance.



The below process does the complete background job of automation like sending approval notifications and responsible for migrating the objects to the configured instances with proper approvals.





Business Benefits

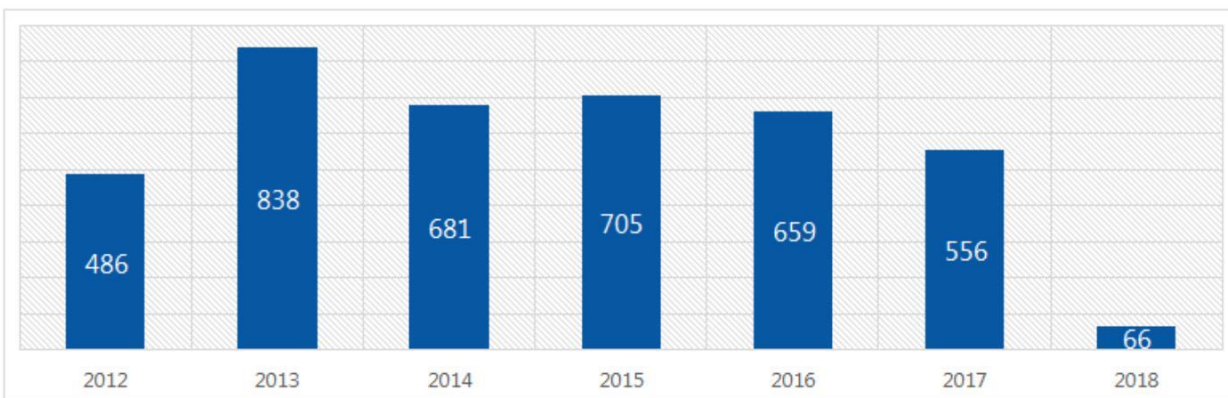
Trinita provided the automation of object migrations for different routes (PROJ-UAT-PROD, DCLONE-PROD etc.)

As a result, SunPower gained the following business Benefits.

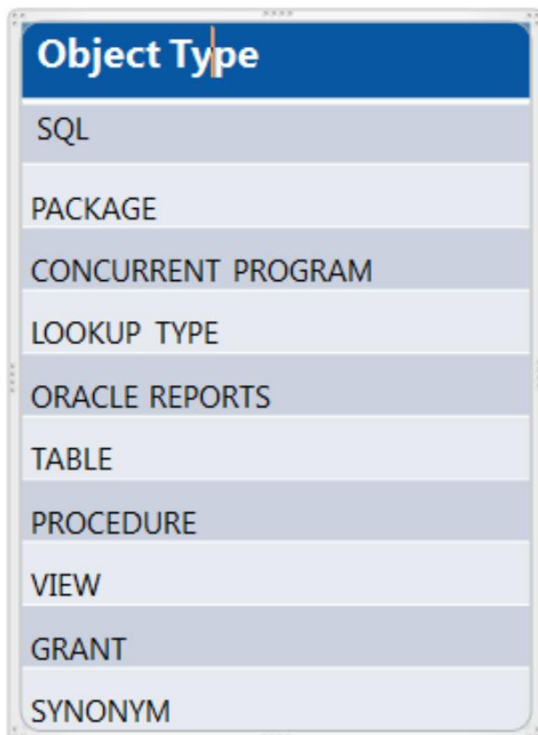
- Able to get the detailed audit on object migrations.
- Complete governance around the migration.
- Consistent migration process.
- Reduced cost on manual efforts due to the automation.
- Automated emails with migration documents.

Migration Statistics

Given below is a brief statistics of migrations being performed using Trinita AOM software since year 2012. SunPower has completely migrated to Automated migration processes.



Most Frequently Migrated Object Types:



Technologies Supported for Oracle EBS suite Migration.

- All the Oracle Database Objects
- XML Publisher Templates/Reports.
- Oracle EBS AOL Objects.
- Discoverer Administrator and Discoverer Reports.
- Oracle Forms.
- Oracle Reports.
- Linux Shell Scripts.
- Oracle Application Framework Java Objects (OAF).

List of Objects supported at Sun Power by AOM:

AOL Objects	Oracle Objects	Database Objects	OS scripts
Alerts	Oracle Forms	Functions	Copy
Web ADI Layouts	Oracle Reports	Grants	Copy and Extract
Collection Elements	BI Publisher reports Definitions	Indexes	Shell script Execution
Collection Plans	BI Publisher reports	Materialized Views	
Concurrent Programs	Custom OAF Page/Regions	Packages	
Descriptive Flexfields	Controller Class Files	Procedures	
Executables	Class Files	Sequences	
Value Sets	Class Files Personalization	SQL scripts (DML scripts)	
Values Sets with Value	Oracle Workflows	SQL	
FND Attachment		Synonyms	
Functions		Tables	
Form Personalization		Triggers	
Responsibilities		Types	

Users		Views	
Forms			
Functions			
Key Flexfields			
Integration Repository Objects			
Lookups			
Menus			
Message Dictionaries			
Printer Styles			
Profile Options			
Request Groups			
Concurrent Request Set			
Patches			

In addition to the above Oracle EBS technologies, support for the below **Infolease object migrations** was implemented at SunPower.

InfoLease Objects
Reports
Programs
Dictionary objects
Scripts

Tool also provides support for migration of ADF pages, JSF pages and other Java/JEE technology related objects. As it is process driven, migration of any new technology related objects is possible with in less time.

Testimonial



Oracle EBS Code migration becomes easy and stress-free using the TRI² Code migration tool with various migration options like On-Demand, Scheduled, Automated with hierarchical approval process, also sends the detail level status notification for all the objects for each step. More importantly it allows to roll back the object to its previous version when needed.

The right migration tool is significant for successful automated code migration since Oracle ERP is using many Software technologies like Oracle Forms, Oracle Reports, Discoverer Admin/Desktop, Oracle Database Objects, Oracle Application Objects Library, XML Publisher Template and Report , Oracle Application Framework(OAF) Java objects.

I am extremely happy as TRI² Tool is supporting all these technologies and provides flexible choices with exceptional support team.

*- Velu Kaliyaperumal
Head of IT Operation. Global Enterprise Applications, SunPower*



About Triniti

Founded in 1997, Triniti provides world-class business and application consulting, along with software products specifically designed to extract the full value of Oracle's e-Business Suite. At Triniti, we understand that high quality data, which can be immediately acted upon, provides a strategic advantage in the marketplace. Triniti products and Oracle e-Business Suite implementations are designed to deliver a finely tuned, robust environment that supports consistent, fact based decision making in real time.

We provide best in class solutions for complex supply chains comprising internal and/or outsourced manufacturing. Triniti has successfully led large multi-site, multi-country "big bang" implementations of the entire e-business suite. Likewise, Triniti has also implemented for much smaller companies using techniques that compliment their business objectives.

