DynaSys - Overview

What is DynaSys?

DynaSys is a Demand & Supply Chain Planning software (DSCP).

It is frequently used by many of our GBUs to share and centralize data so a production plan can be built for months or years to come.

In distribution and production management, with DynaSys it becomes possible for GBU planners to create and compare multiple planning “What if” scenarios, taking into account physical constraints (production capacities...) and financial impacts of these scenario (contribution margin...). As a consequence, GBU planners will be able to choose and build an optimum and realistic planning.

DynaSys offers many uses

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Why would we use DynaSys?

A statement was made and these are common results:

- Low forecast
- Low schedule adherence (realized production vs planned)
- Poor OTIF (« on-time in full ») = service to customer
- Lack of KPI dashboard
- Poor inventory management

A tool for planners would help to build up an optimum and realistic planning so these criteria can be fulfilled correctly.
Back in 2014, the GBU’s Supply Chain, supported by SBS selected the Dynasys tool among a panel of software providers for its user friendliness and ability to meet our various business requirements.

How does DynaSys work?

DynaSys is composed of 3 major modules in Solvay’s process:

Demand Planning (DP)
Distribution Planning (DiP)
Production Planning (PP)

DynaSys Demand Planning is the planning module where the users can use several method of forecasting (statistical, web collaborative, top down) in order to send forecast to the distribution module.

DynaSys Distribution Planning is the planning module for DynaSys logistics networks. The network planning means to plan the movement of materials between different geographic sites and the inventory levels of different warehouses. Complex distribution networks can be modeled as well. The main objective of this module is the planning of inter-site distribution.

DynaSys Production Planning is the planning module for plants production plan calculation. The demand is an input from DynaSys Distribution. Users adjust the capacities on production constraints. They calculate a plan to cover the requested demand. The projected available inventories are the result of the production plan. Production Planning is done for x levels of manufacturing. The projected available inventories are the input of the distribution network (DynaSys Distribution Planning).

We usually link DiP and PP together.

Overall process and link between DP & DiPPP

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DP Overview

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1) Data import from SAP (BW)
2) History cleansing: anomalies are deleted so the seasonality & tendency give statistical forecast.
3) Life cycle management (supersession = product replacement - end of life - new product launch)
4) Statistic based forecast = based on history (unconstrained forecast)
5) Sales team Inputs: input CSR + Sales Team forecast + sales prices, they use the Web Access usually and it's part of the collaborative forecast.
6) Demand review is the final step of the forecast validation
7) Forecast accuracy = improvement that can be done with the forecast

DiPPP Overview

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1) Sales requirement (given from DP)= unconstrained forecast or final forecast in volume & price
2) DRP = Distribution Requirement Planning = logistic management (lead time, authorized flow, stock mini level…), with shipping & receiving requirements
3) Production Plan = multi level plan calculation based on constraints (capacity, batch size, mini/max quantity…) view at aggregated level of ressource
4) Deployment = delivery + products deployment following the plan
5) S&OP Plan -> scenariis
6) Budget calculation then reporting

The link of DynaSys with other applications and between DynaSys itself

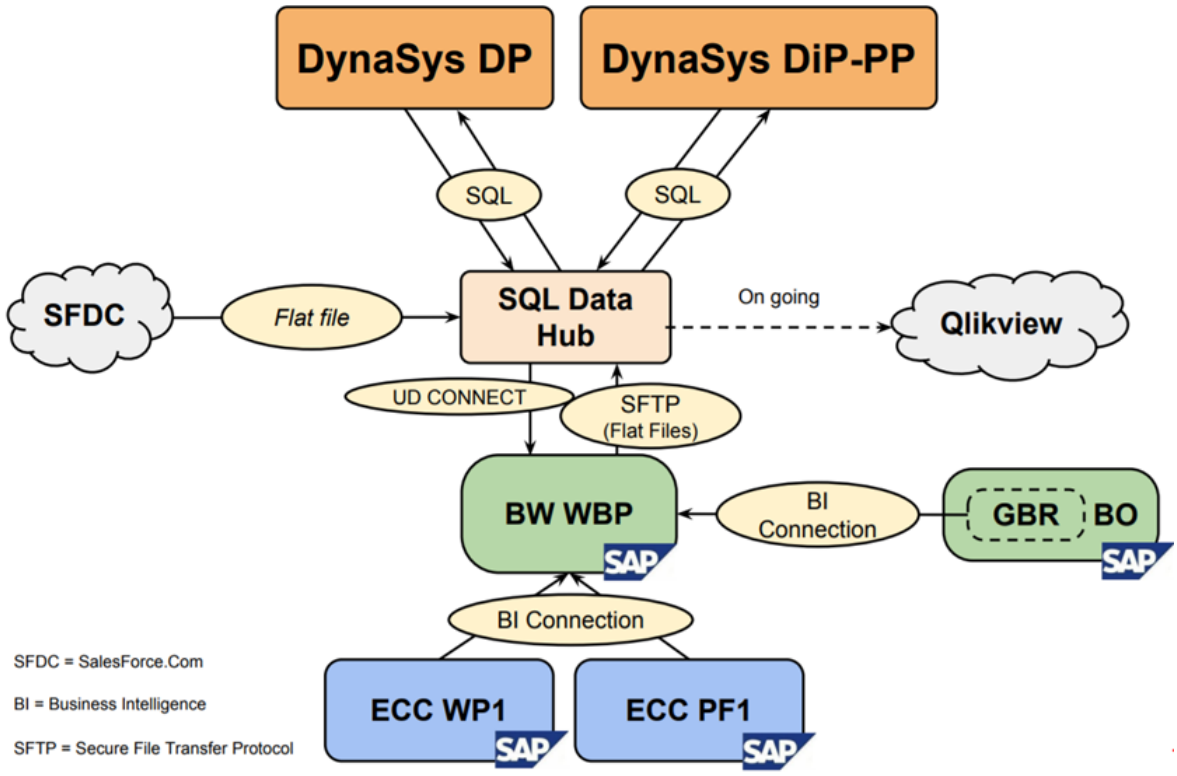
Import :

•Master data (DFU, Material, Plant, etc.)
•Actuals (Demand history, shipped history, Inv history…)

Export :

•BW Forecast Accuracy and Demand Review reporting
•Between DP & DiP
•Flat files (to SAP, …)

Interface overview


DynaSys DP
DynaSys DiP-PP
SQL
SQL
SFDC
Flat file
SQL Data Hub
On going
Qlikview
UD CONNECT
SFTP (Flat Files)
BW WBP
BI Connection
GBR
BO
BI Connection
ECC WP1
ECC PF1
SFDC = SalesForce.Com
BI = Business Intelligence
SFTP = Secure File Transfer Protocol