

o9 Academy

# Course Catalog

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# o9 IBP Platform Learning Programs

# Certification Category

## Introduction

This course explains how o9 platform is relevant in the Supply Chain planning domain. This course will help you identify the key differentiators and provide you with an overview on how to navigate the Web UI, Excel UI,

and the Mobile UI. You will also be able to identify the benefits of using o9 in different planning roles, including Demand Planner, Supply Planner, S&OP Planner. This is for Partners.

## o9 Platform Functional Overview

This course provides the functional overview of the o9 Platform, which includes:

- Next Gen IBP
- o9 Platform — Capabilities & Differentiators
- o9 EKG
- Day in the Life of a Business Planner
- Day in the Life of a Supply Planner

- Day in the Life of a Demand Planner
- o9 Platform — User Interfaces (Web UI, Connected Excel, Mobile UI)

Note: The videos in this program are for "view only". You cannot simulate the navigational steps, as you might not have access to a working environment (tenant).

## Creating a Model Beginner's Guide

This Learning Program lays the foundation or the building blocks to help you create a simple Model. You will create the Model structure, load the data into the o9 Platform, configure the UI elements, create simple Rules, create Action Buttons to be used by the end user, and explore Debugging & Deployment

Workspaces. By completing this Learning Program, you will be able to create a simple Model including some of the Widgets, create simple Rules, design a dashboard, and create some on-demand Rules using Action Buttons and attach that to Widgets.

## Creating a Model Intermediate Guide

This Learning Program lays the foundation or the building blocks to help you create a simple Model. You will learn about Rules and Scope, create Active Rules, Procedures and Graphs, implement

Cartesian Scope, Spread Scope and Recurrence Scope, and explore Action Buttons by adding more field binding types.

## Creating a Model Advanced Guide

The Advanced Guide talks about some advanced concepts such as Plugins, Using JavaScript, and Web API connections, working with Edges and Measures in

Graph Model, and many more. These concepts give you more insight into configuring your Model.

# Hands-on Exercises

## Tutorials

### Enterprise Modelling — Creating Basic Model Constructs

This course consists of a set of tutorials that enables you to build a basic model using o9 Platform. Before you attempt these tutorials, you should have gone through the below 2 Learning Programs:

1. Creating a Model
  - Beginner's Guide
2. Creating a Model
  - Intermediate Guide

## Assignments

### Enterprise Modelling — Creating Basic Model Constructs

The aim of this set of assignments is to re-enforce the learning from the below two Learning Programs:

1. Creating a Model
  - Beginner's Guide
2. Creating a Model
  - Intermediate Guide

The sample data required to carry out these assignments and the initial Model Constructs is part of the practice tutorials.

Note: There is are answer keys provided.

### Enterprise Model Creation — Case Studies

These case studies are designed to help you understand and implement all the Basic modelling concepts learnt as part of Creating a Model — Beginner's Guide and

Intermediate Guide. These assignments are self-paced, and the detailed instructions and relevant data sets are included in the case study documents.

# Other Programs

## IBPL for Beginners

This Integrated Business Planning Language (IBPL) beginners course gives you an insight into how you can use IBPL to query your member data, manage your members,

understand the concepts of graph and relationships, create rules, and implement data security. This Course contains PPTs primarily.

## o9 Platform Architecture

This module provides a high-level overview on how all the components work and

communicate with each other that forms the architecture of the o9 Platform.

## Action Button Short courses to explain different FieldBinding Types

- Action Buttons
  - Basic Fieldbinding Types
- Action Buttons
  - DataSource Fieldbinding Types
- Action Buttons — Parent Attribute

- Fieldbinding Types
- Action Buttons
    - Miscellaneous Moustache Templates

## Report Designer Widgets

This course provides an overview of the following widgets:

- Pivot
- Bubble Chart
- Line Chart
- Network
- NLP Report
- Pulse
- KPI
- Calendar
- Task
- Master Data

- NLP Analytics
- Geo Map
- Indented Grid
- Scenario Manager
- Where Used

Note: The videos in this program are for "view only". You cannot simulate the navigational steps, as you might not have access to a working environment (tenant).

## Hadoop Hive Overview

In this course, you will learn:

- Overview of Hadoop
- HDFS Architecture
- Data Replication
- Common Hadoop Tools
- Important Hadoop Ecosystem Tools Used In ABC Project

- Apache Spark
- Airflow
- ABC Project
- Demo

# o9 Reference Products Learning Programs



# Certification Category

## Supply Chain Planning Overview

In this course, you will learn the basic concepts regarding Supply Chain Solver in context to our o9 Platform. This course has 3 Modules. The basic objectives of the Modules are to answer the following questions:

- In a Supply Chain, what are the Fulfilment and Process Models?
- What are some of the core components involved during planning a Supply Chain?
- What do you need to configure as a pre-requisite in the o9 Platform to effectively use the Supply Chain Solver?

## Reference Model Supply Planning (R2020.09)

This Certification Program enables you to learn about our Supply Planning Reference Product. You will get to know about the Strategy behind the design of this Reference Product, get a Process deep dive, learn how our Solver behaves in certain conditions or with certain Parameters. The Program also gives an insight into the Integration framework.

In addition, this Program provides you an overview of various test cases designed to understand different configuration parameters of the Supply Planning Reference Model. Important cases related to input parameters and plan parameters are explained, and you will also know the solver behavior in different scenarios.

## Reference Product Demand Planning (R2020.09)

This Certification Program enables you to learn in detail about our Demand Planning Reference Product. You will get to know about the Strategy behind the design of this Reference Product, get a Process deep dive, understand various planning concepts and the Key capabilities. The Program also gives an insight into the Integration approach.

In addition, this Program provides you an overview of various exercises designed to understand different scenarios of the Demand Planning Reference Product. Important aspects related to the System Stat and Segmentation are also explained.

## Reference Product Multi-Echelon Inventory Optimization—MEIO (R2020.09)

Multi-echelon inventory optimization (MEIO) balances inventories across the entire supply chain network, considering the interdependencies between echelons. Organizations that go beyond single-echelon inventory optimization (IO) offer highly competitive service levels and see a reduction in – or elimination of – stockouts.

The MEIO Certification Program enables you to get an insight into the MEIO Reference Product, know MEIO as a tool, its core capabilities, and benefits.

# Version Updates — Reference Products

## Version Released December 2020

- Control Tower R2020.12
- What's NEW in Demand Planning Reference Product R2020.12
- What's NEW in MEIO Reference Product R2020.12
- What's NEW in Supply Planning Reference Product R2020.12

## Version Released March 2021

- What's NEW in Control Tower Reference Product R2021.03
- What's NEW in Demand Planning Reference Product R2021.03
- What's NEW in MEIO Reference Product R2021.03
- What's NEW in Supply Planning Reference Product R2021.03

# Case Study — Reference Products

## Pineapple Computers Case Study

This case study enables you to build a Model from scratch, configure the Solver and implement some of the Supply Planning concepts such

as Pegging, Lead Times, Capacity Constraints, maintaining Safety Stock and Lot Sizes.

# Supply Chain Solver (SCS)

## Beginner's Guide to Supply Chain Solver (SCS)

The primary goal of the Supply Chain Solver (SCS) is to make a demand supply match by adhering to the business priorities/ rules such as Demand/Customer Priorities, Inventory Policies, and Demand Fulfilment. The secondary goals include the following

- Excess inventory to be minimized
- Costs to be reduced
- Product time to market to be improved
- Agility and resilience to be enhanced

The solver works by taking inputs and processing them to generate the feasible plan or output.

## SCS Features and Capabilities

The Supply Chain Solver (SCS) is the flagship feature of the o9 Platform. This module provides an overview of the features and capabilities of the SCS.

## SCS Series

This series will cover various short videos on SCS features which will give you a quick snippet on how to use these features in Solver. This Module includes videos on features such as SCS Differentiators, Supply Code and Shelf Life.

## SCS Configuring an Instance

This two-part video shows you the various parameters required to configure a Solver instance.

## SCS Debugging Series

This module includes short videos on various features available for users when Debugging in SCS. The videos available in this series are:

- How to Create SCS TFS?
- Solver Timings Increased
- Output Changed on Porting to New Environment
- How to Validate SCS Plans?
- How to Read Logs?

## Overview Linear Programming Solver

This video highlights the Linear Programming Solver (LPS), another Solver that could be configured for planning purpose. Linear Programming Solver (LPS) is a newly developed python-based plugin integrated in the o9 Platform, which is available to all customers. It is synonymous with SCS (Supply Chain Solver) for business needs and uses the linear programming formulation, whereas SCS is a heuristics solver.

## LP Solver Optimization & Troubleshooting

The Linear Programming Solver (LPS) is a python-based plugin integrated in the o9 Platform. It is synonymous with SCS (Supply Chain Solver) for business needs and uses the linear programming formulation, whereas SCS is a heuristics solver.

LPS takes all permutations in one objective function and tries to find the global optimal solution, as opposed to an order-by-order approach of an SCS.

## SCS Use Cases

This course showcases 3–4 use cases for configuring Supply Chain Solver.

# Data Analytics and Machine Learning Learning Programs

## Analytics & Data Science

This Learning Program will provide you with knowledge to work on R and Python Plugins using the o9 Platform. The modules in this Learning Program includes:

- Introduction to o9 Platform
- R & Introduction to Statistics
- Time Series Forecasting
- Python Introduction to AI/ML

## Beginners Guide to Forecasting Using R

This course introduces the foundation of forecasting methods using time series graphics and some basic forecasting methods that can aid

the learners in their daily forecasting activities. The course also explores a few established methods used to obtain reliable judgmental forecasts.

## Python Plugins Creating Plugins

This course will give you an overview of Python programming, architecture and benefits with respect to o9

platform. You will also learn to configure a simple Python Plugin and understand the debugging process.

## Python Machine Learning

This course will walk you through the basic Machine Learning concepts along with various pipeline processes & algorithms from the o9 platform's

perspective. You will also perform hands-on exercises including activities like configuration, plugin setups and debugging loggers.

## Python Plugins Execution & Tuning

In this course, you will learn an overview of Python Programming, architecture, and benefits with respect to o9 Platform. You will also learn to configure a simple Python Plugin and understand the debugging process.

The videos also cover the following:

- Introduction
- Terminology
- Plugin Execution
- Code Execution Time
- Tuning Options
- Slice Bucket Count
- Spark Profile Config
- Power User Settings
- Starbucks Use Case Problem Scenario
- Starbucks Use Case Execution Metrics
- Coding Best Practices

# Art of the possible Retail



# Art of the possible Retail

## AOTP Retail Overview

In this course, you will learn about o9 Retail Platform, a Digital Transformation Platform. The course covers the key differentiators and capabilities of o9 platform. You will also learn the implementation methodology at o9 and the key workspaces of o9 platform.

## Allocation Process

In this course, you will learn the Allocation Process Workflow.

## Assortment Planning

In this course, you will learn the Assortment Planning Workflow.

## Forecast Process

In this course, you will learn the Forecast Process in the Retail industry. The course covers the workflows related to Retail Forecast, Daily Forecast and Wholesale Forecast.

## Merchandise Financial Planning (MFP)

In this course, you will learn the critical workflow steps in Merchandise Financial Planning Process in both pre-season and in-season.

## Replenishment Plan

In this course, you will learn weekly and daily replenishment. The course covers the set of inputs that are configured in the workflow and the standard outputs that are required for replenishment. It also covers a demo of Purchase Order Planning and collaboration.

## RetailE2E Release (R2)

In this course, you will learn the scope of RetailE2E Release (R2), which will help sales team to demonstrate retail planning workspace capabilities to prospects.

## Workflow Stories

In this course, you will learn insights from the below Stories:

- Merchandise Financial Planning (MFP)
- Assortment Planning
- Forecasting

# The Physics of Supply Chain

# The Physics of Supply Chain

## Basics of Supply Chain

This course explains the system in which a supply chain works. You will be able to identify the different stages that are involved in a supply chain function of any industry. Some of the stages include Manufacturing, Transportation or Shipping, Production, and Distribution.

## Allocation Process

In this course, you will learn the Allocation Process Workflow.

## Assortment Planning

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- Forecasting

# o9 Process Learning Programs

## o9 Process Learning Programs

### o9 Project Implementation Methodology

The o9 Implementation Methodology Program outlines the end-to-end implementation approach, at a higher level, for the projects at o9 across all the functional areas. The o9 Implementation Methodology is a confluence of agile and waterfall methodologies that utilizes the best principles of both. Learn the key phases in any project implementation by going through this program.

Note - This Program also mentions some templates and documents that have been shared in a google drive. Please note that access to this shared drive will be given only if you are an active part of an Implementation.

### Solution Architect Value Focus and Best Practices

This program is a high-level functional discourse of the responsibilities, expectations and best practices approach for Solution Architects. The workshop discusses insights on business analysis, As-Is and To-Be process flows, process mapping and implementation challenges, duly supported by case studies, references and documentation.

# Data Integration

# Data Integration

## Introduction

In this course, you will get introduced to some of the concepts of integration, and its related processes. The videos cover the following:

- Data Flow & Integration Overview
- What Data We Need?
- How Do We Get Data?
- Integration Process Overview
- Defining Transformations

## Integration Services SSIS

In this Learning Program you will be introduced to o9's Integration Services amongst, which one of them is SQL Server Integration Service (SSIS).

Also, you will understand the benefits of SSIS. Finally, you will learn about TFS, Data Flow Transformation and Data Flow Destination.

In the SSIS Overview module, you will learn about the concept of Extraction, Transformation and Load.

Multiple course modules will be made available as part of this Learning Program in the upcoming months.

## Reference Product Integration (R2020.12)

The Reference Product Integration Program gives a high level overview of SSIS integration solution developed for "Supply Planning", "Demand Planning" and "Multi-echelon Inventory Optimization" Reference Model. This solution can be taken as a starting point for integration batch run using the respective Reference

Model and can be further customized by implementation team.

This Program also gives an introduction to Integration Database Management - Excel Config and the Time generation Utility.