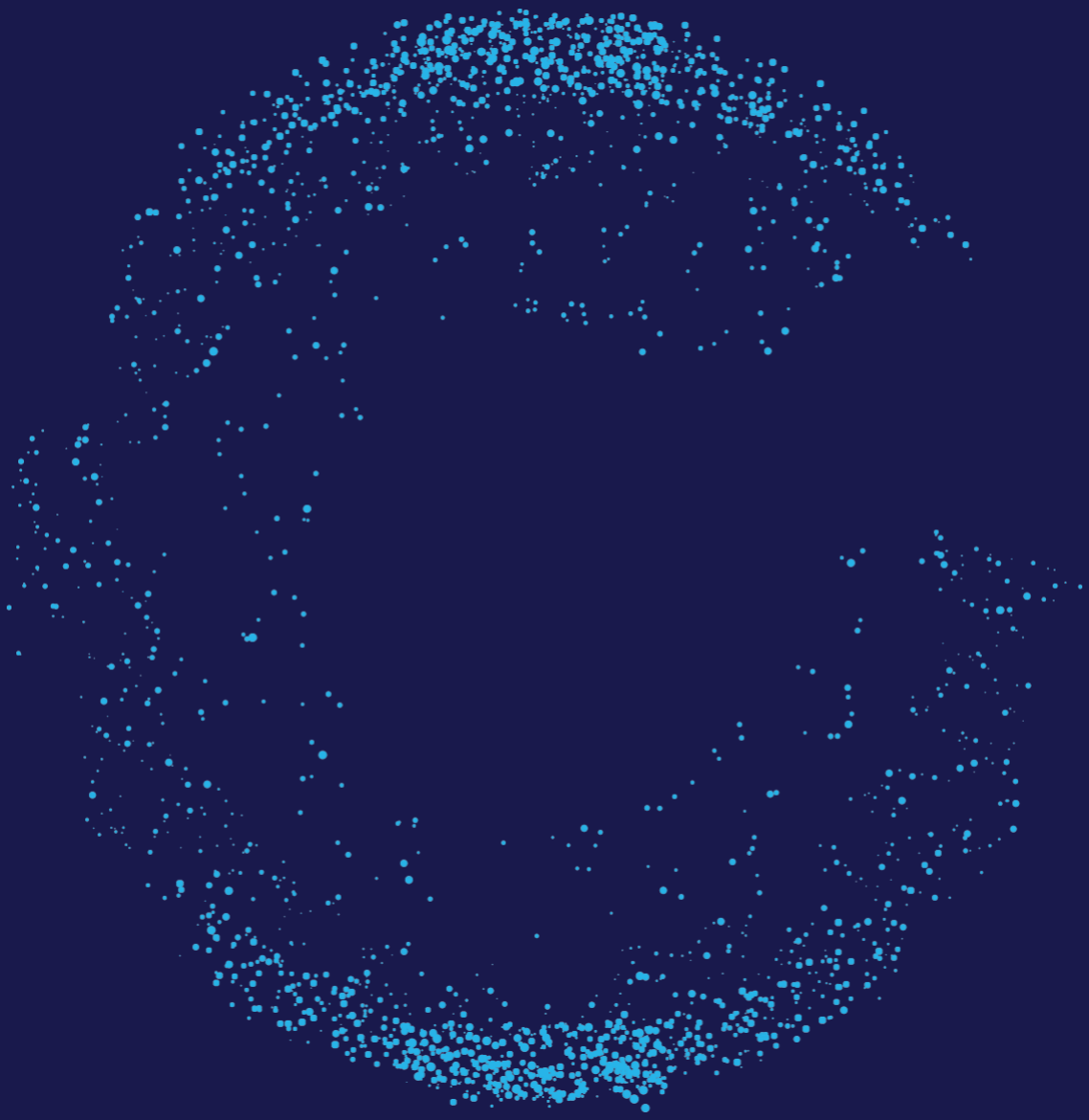
Education Services

Course Catalog



Transportation Management System

BlueYonder
Move beyond boundaries

About This Catalog

This catalog is your essential guide to Blue Yonder Transportation Management System (TMS) instructor-led training courses. Whether you are a new user or an experienced professional, the courses outlined in this catalog help you gain the knowledge and skills required for the successful adoption and effective use of Blue Yonder TMS.

The catalog provides a structured overview of available courses and their learning objectives, audience, and duration. For assistance or guidance in selecting the required courses, you can contact your Blue Yonder Customer Experience or Education Services team.

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About Blue Yonder Education Services

Blue Yonder Education Services seeks to improve supply chain excellence by offering innovative, tailored, and cost-effective training solutions. It focuses on transforming training with adaptable, high-quality programs that help you achieve your business goals, deliver industry-leading performance, and drive economic growth. Blue Yonder Education Services' core offerings include:

- Product courses delivered in person or virtually, as instructor-led training
- Public schedule and private course events
- Applied coaching and mentoring services
- Digital subscriptions and online courses
- Certifications
- Skill gap analysis surveys and training need assessments
- Organizational change and end-user training advisory and professional services

Blue Yonder Training Courses

Designed to facilitate effective adoption and utilization of its software solutions, Blue Yonder training courses provide a structured, expert-guided learning experience.

Features and Benefits

- Offer in-person or live virtual classroom training, delivered by a qualified Blue Yonder instructor, with standard or customized courses and hands-on exercises
- Provide comprehensive training on specific Blue Yonder solutions and related business processes
- Ensure learner engagement throughout the training program
- Award learners with badges and certification, when applicable

Blue Yonder TMS Course Catalog—Overview

The Blue Yonder TMS catalog provides comprehensive training courses designed for different audiences in an organization. These courses combine learning concepts with practical exercises that help learners deepen their knowledge of TMS.

Course Name	Learning Objectives	Audience	Duration
Level 1: Foundation			
5280: Transportation Manager	After completing this course, learners will be able to: • Define the terms used in Blue Yonder Transportation Manager. • Set up process and components of Transportation Manager. • Navigate through the Web and Smartbench user interfaces. • Create principal entities. • Create shipments. • Build and process loads. • Explain the key features of Transportation Smartbench. • Create a new account payable voucher for confirmed shipment. • Evaluate the effectiveness of different tariff structures on shipment costs. • Configure location constraints and business rules. • Create a delivery schedule. • Configure manual and automatic dock scheduling. • Set up routing guide rules. • Configure pallet types using the Transportation Manager user interface.	Transportation Manager project team and end users	4 days

5295: TMS on Network Solution Overview	After completing this course, learners will be able to: • Describe the TMS on Network solution capabilities. • Identify the key terms related to the TMS on Network solution. • Explain how TMS on Network provides order visibility and collaboration. • Describe the tendering workflow in Transportation Manager. • Describe carrier collaboration capabilities. • Explain how Network Telematics provides real-time updates. • Describe how network transportation visibility provides real-time status visibility. • Identify the different methods of appointment creation and dock commitments.	All users of TMS on Network	1 day
5290: Transportation Modeling *This training is exclusively available to customers who have purchased the Modeling (Azure) product. It is crafted to specifically address the distinct features and functionalities inherent in Azure cloud environments. Please confirm your product purchase to ensure compatibility with this training offering.*	After completing this course, learners will be able to: • Describe Transportation Modeling and its features. • Navigate through Transportation Modeling user interface, utilizing its functionalities. • Create and optimize starter models. • Define scenarios, verify data, and configure solver options. • Apply location constraints and add business hours, routing, and transit overrides. • Incorporate hubs into models. • Develop a tariff strategy using the access rating tool. • Design delivery schedules to streamline transportation planning. • Evaluate different strategies and parameters to optimize solve results. • Model continuous moves using strategy files and access rating tool. • Explain the functions of different reports generated postoptimization.	Transportation Modeling Project team and end users	4 days

5262: Transportation Modeler Level 1 *This training is available to customers who have purchased the Modeler (On-Prem) product. It is crafted to specifically address the distinct features and functionalities inherent in the on-premise environments. Please confirm your product purchase to ensure compatibility with this training offering.*	After completing this course, learners will be able to: • Describe Transportation Modeler and its features. • Navigate through Transportation Modeler user interface, utilizing its functionalities. • Create and optimize starter models. • Define scenarios, verify data, and configure solver options. • Apply location constraints and add business hours, routing, and transit overrides. • Incorporate hubs into models. • Develop a tariff strategy using the access rating tool. • Design delivery schedules to streamline transportation planning. • Evaluate different strategies and parameters to optimize solve results. • Model continuous moves using strategy files and access rating tool. • Explain the functions of different reports generated postoptimization.	Project team and end users of Transportation Modeler	4 days
Level 2: Core			
5265: Transportation Modeler Level II *This training is available to customers who have purchased the Modeler (On-Prem) product. It is crafted to specifically address the distinct features and functionalities inherent in the on-premise environments. Please confirm your product purchase to ensure compatibility with this training offering.*	After completing this course, learners will be able to: • Describe Transportation Modeler's advanced functions and entities. • Illustrate the advanced modeling techniques. • Configure carrier equipment availability penalties. • Describe how domiciles and equipment types are modeled to reduce cost. • Describe equipment type associations and model tractors and trailers. • Describe and model dock scheduling. • Configure performance-based ratings for optimizing load assignments. • Apply dynamic shipment splitting techniques to improve modeling flexibility. • Utilize containerization and axle balancing to manage capacity.	Project team and end users of Transportation Modeler	3 days

Level 3: Specialist and Advanced			
5285: Transportation Planner	After completing this course, learners will be able to: • Describe the business benefits and configuration needs in Transportation Planner. • Customize the Transportation Planner interface. • Describe the Transportation Planner rich Internet application benefits and functions. • Execute and manage optimization requests. • Plan and edit trips and loads. • Apply and adjust optimization strategies using strategy file editor. • Model carrier equipment constraints domicile vehicle availability. • Configure dock scheduling based on operational constraints. • Create and customize charts for visualizing transportation planning data.	IT members and Superusers of Transportation Planner	2 days

TMS Course Details

5280: Transportation Manager

Course Objectives

After completing this course, learners will be able to:

- Define the terms used in Blue Yonder Transportation Manager.
- Set up process and components of Transportation Manager.
- Navigate through the Web and Smartbench user interfaces.
- Create principal entities.
- Create shipments.
- Build and process loads.
- Explain the key features of Transportation Smartbench.
- Create a new account payable voucher for the confirmed shipment.
- Evaluate the effectiveness of different tariff structures on shipment costs.
- Configure location constraints and business rules.
- Create a delivery schedule.
- Configure manual and automatic dock scheduling.
- Set up routing guide rules.
- Configure pallet types using the Transportation Manager user interface.

Audience

Transportation Manager project team and end users

Prerequisites

No prerequisites are required for this course.

Duration

4 days (in person or virtual)

Training Level

Beginner and intermediate

Lesson Name	Learning Objectives	Duration
01: Overview and Terminology	After completing this lesson, learners will be able to: • Describe the significance of Transportation Manager. • Define the key terms used in Transportation Manager.	1 hour

02: Workflows	After completing this lesson, learners will be able to: • Identify the workflows involved in Transportation Manager. • Describe the setup process and components of the Transportation Manager system. • Explain the functionality of different Transportation Manager modules. • Describe the configuration of master data within the System Setup module.	1.5 hours
03: Navigation	After completing this lesson, learners will be able to: • Identify the main components of the Transportation Manager user interface. • Navigate through various Transportation Manager modules. • Customize the user interface settings for personalized user experience. • Utilize wildcard and search exclusion characters to optimize search operations.	1.5 hours
04: User Security	After completing this lesson, learners will be able to: • Outline the process for creating Transportation Manager users and user groups. • Explain how Transportation Manager supports user authorization and security settings. • Apply user group configurations for appropriate module access for different user types.	1 hour
05: Entities	After completing this lesson, learners will be able to: • Describe entities. • Define the key entities involved in the Transportation Manager system setup, such as customers, carriers, and tariffs.	1 hour
06: Setting Up Entities	After completing this lesson, learners will be able to: • Explain the process and sequence of setting up entities. • Demonstrate how to create an item and set its attributes.	1.5 hours
07: Operational Life Cycle	After completing this lesson, learners will be able to: • Explain the operational life cycle of Transportation Manager and its significance. • Assess the impact of different operational modules on the transportation workflow. • Utilize various modules in Transportation Manager to optimize load efficiency.	1.5 hours

08: Shipment Processing and Load Building	After completing this lesson, learners will be able to: • Create shipments using the Shipment Processing module. • Manually build a load plan in the Load Build module. • Identify the best carrier using rate shop.	1.5 hours
09: Load Processing and Load Confirmation	After completing this lesson, learners will be able to: • Execute the load processing steps. • Explain the steps required for tendering a load. • Describe how carrier sequential tendering helps automate the tendering process. • Confirm a load. • Describe how shipments and loads can be tracked.	1.5 hours
10: Transportation Smartbench	After completing this lesson, learners will be able to: • Describe the key features of Transportation Smartbench. • Perform routine operational life-cycle tasks using Transportation Smartbench. • Describe the functions of job server and how it helps with automation.	1.5 hours
11: Transportation Smartbench: Navigation	After completing this lesson, learners will be able to: • Navigate within Transportation Smartbench. • Customize entity grid layouts to meet user-specific needs. • Handle errors in the entity views. • Configure and execute summary type searches for load, trip, and booking attributes.	1.5 hours
12: Transportation Smartbench: Results Panel	After completing this lesson, learners will be able to: • Explain summary, entity, map, and other results panel views. • Create new asset assignments and manage their life cycle. • Create a map layout based on user-specific needs.	1.5 hours
13: Tariff Structures	After completing this lesson, learners will be able to: • Identify the main components of a tariff and their functions. • Describe the process of creating a tariff. • Explain how carrier and customer charges differ within a tariff system.	1 hour

14: Creating Tariff Structures	After completing this lesson, learners will be able to: • Calculate tariff charges based on provided distance or weight using rate codes. • Create a tariff and add services, conditions, and rate codes. • Formulate a tariff for a specific carrier. • Compare different types of tariffs and discuss their attributes. • Interpret the significance of zones and lanes in tariff calculations.	1.5 hours
15: Financials	After completing this lesson, learners will be able to: • List the components of the Financials module in the Transportation Manager system. • Explain the difference between Accounts Payable (A/P) vouchers and Accounts Receivable (A/R) vouchers.	1 hour
16: Financials: Creating Vouchers	After completing this lesson, learners will be able to: • Manually create a new A/P voucher for confirmed shipment. • Differentiate between the audit and autopay modes for invoice processing. • Generate a freight bill. • Automate the generation of batch A/P vouchers.	1.5 hours
17: Delivery Schedules	After completing this lesson, learners will be able to: • Explain the concept of delivery schedules. • Create a delivery schedule. • Set up a timetable entry for a delivery schedule specifying arrival and departure points. • Differentiate between elapsed days, days of week, and fixed date scheduling options. • Assign a delivery schedule to a tariff and examine its impacts on shipping operations. • Adjust a delivery schedule itinerary.	2 hours
18: Introduction to Dock Scheduling	After completing this lesson, learners will be able to: • Define dock scheduling and explain its significance. • Identify and label the components of a dock commitment Gantt chart. • Evaluate different strategies for avoiding dock congestion.	1 hour

19: Dock Scheduling	After completing this lesson, learners will be able to: • Illustrate the process of manual and automatic dock scheduling. • Set up location throughput groups to manage dock capacity. • Create and view dock commitments. • Configure a dock schedule in Transportation Smartbench. • Analyze how different equipment and commodity types can affect dock scheduling.	1.5 hours
20: Day in the Life	After completing this lesson, learners will be able to: • Explain a day in the life of a transportation planner. • Upload carriers using the data upload capability. • Upload shipments using the data upload capability. • Optimize shipment and analyze results. • Plan and tender a load in Smartbench. • Confirm a load.	1.5 hours
21: Routing Guide	After completing this lesson, learners will be able to: • Describe the components of routing guide. • Describe how priority rules for carrier selection are implemented. • Utilize data upload utility for uploading routing guide. • Review routing guide rules. • Set up routing guide rules.	30 minutes
22: Palletization	After completing this lesson, learners will be able to: • Describe palletization and its benefits. • Identify the master data entities required for effective palletization. • Compare different pallet types and their applications in optimization. • Distinguish between item types. • Configure and create pallet types. • Evaluate the effectiveness of different palletization strategies in reducing transportation costs.	30 minutes

Hands-on Exercises: This course contains hands-on exercises for practicing the tasks covered in the lessons.

Additional Resources: This course includes additional topics such as Architecture, Glossary, Fuel Surcharge Modeling, Procurement Bridge, and Ocean Booking that can be covered by the trainer based on customer's usage.

5295: TMS on Network Solution Overview

Course Objectives

After completing this course, learners will be able to:

- Describe the TMS on Network solution capabilities.
- Identify the key terms related to the TMS on Network solution.
- Explain how TMS on Network provides order visibility and collaboration.
- Describe the tendering workflow in Transportation Manager.
- Describe carrier collaboration capabilities.
- Explain how Network Telematics provides real-time updates.
- Describe how network transportation visibility provides real-time status visibility.
- Identify the different methods of appointment creation and dock commitments.

Audience

All users of TMS on Network

Recommended Prelearning

5280: Transportation Manager

Duration

1 day (in person or virtual)

Training Level

Beginner

Lesson Name	Learning Objectives	Duration
01: Overview and Terminologies	After completing this lesson, learners will be able to: • List the key components of TMS on Network. • Describe the business benefits and capabilities of TMS on Network. • Outline the key terms related to the TMS on Network solution.	1 hour
02: Order Visibility and Collaboration	After completing this lesson, learners will be able to: • Explain how order visibility and collaboration enables buyers and suppliers to collaborate with each other. • Explain the purchase order process workflow. • Create, view, and agree to a purchase order.	1.5 hours
03: Transportation Manager–Tendering	After completing this lesson, learners will be able to: • Review the key features of Transportation Manager. • Consolidate the shipments to a load. • Tender a load to a carrier.	1 hour

04: Carrier Network Collaboration	After completing this lesson, learners will be able to: • Explain how carrier network collaboration enables carriers to collaborate with shippers. • Explain the load tender process flow. • Describe the process flows for exchanging documents, proof of deliveries, and freight bills. • View and respond to a tender request. • Update load statuses during load execution.	1 hour
05: Network Transportation Visibility	After completing this lesson, learners will be able to: • Explain how network transportation visibility helps achieve end-to-end visibility across the network. • Outline the key features of network transportation visibility. • Describe the predictive estimated time of arrival feature. • View the real-time status of a load.	30 minutes
06: Network Telematics	After completing this lesson, learners will be able to: • Explain how network telematics capability provides critical freight milestone tracking updates. • Describe the key features of network telematics. • Explain how network telematics integrates with external partners.	1 hour
07: Network Appointment Scheduling	After completing this lesson, learners will be able to: • Manage the scheduling of the dock and stop appointments. • Describe the process flow involved in network appointment scheduling. • Explain the different methods of appointment creation.	1 hour

5290: Transportation Modeling

Course Objectives

After completing this training, learners will be able to:

- Describe Transportation Modeling and its features.
- Navigate through Transportation Modeling user interface, utilizing its functionalities.
- Create and optimize starter models.
- Define scenarios, verify data, and configure solver options.
- Apply location constraints and add business hours, routing, and transit overrides.
- Incorporate hubs into models.
- Develop a tariff strategy using the access rating tool.
- Design delivery schedules to streamline transportation planning.
- Evaluate different strategies and parameters to optimize solve results.
- Model continuous moves using strategy files and access rating tool.
- Explain the functions of different reports generated postoptimization.

Audience

Transportation Modeling Project team and end users

Prerequisites

No prerequisites are required for this course.

Duration

4 days (in person or virtual)

Training Level

Intermediate and advanced

Lesson Name	Learning Objectives	Duration
01: Overview	After completing this lesson, learners will be able to: • Identify the business benefits of Transportation Modeling. • Describe the key components of Transportation Modeling. • Explain transportation modeling techniques to create an optimized transportation plan. • Compare different transportation scenarios.	1 hour

02: User Interface	After completing this lesson, learners will be able to: • Explain the basic functionalities of various pages and tables within Transportation Modeling. • Navigate through Detail Table to filter, import, export, and manipulate data. • Assess input and output data of solved scenarios. • Create entity relationships and attributes to categorize data.	1 hour
03: Building a Starter Model	After completing this lesson, learners will be able to: • Build a starter model by providing information on locations, shipments, geocodes, and map zones. • Analyze the role of entities, relationships, and attributes. • Create a scenario in Transportation Modeling. • Evaluate the effectiveness of a starter model by interpreting import results. • Identify errors using error logs. • Configure geocoding of location data to provide latitude and longitude coordinates. • Use the road map feature to view locations, shipments, loads, and trips.	2 hours
04: Introduction to Optimizing a Starter Model	After completing this lesson, learners will be able to: • Define optimization in the context of Transportation Modeling. • Describe the data requirements for performing optimization. • Demonstrate various data validation techniques to ensure data accuracy and readiness for optimization.	1 hour
05: Optimizing a Starter Model	After completing this lesson, learners will be able to: • Configure and optimize a starter model using the solver engine. • Adjust strategic parameters as necessary. • Analyze the optimization log and output summary to evaluate the effectiveness of optimization strategies. • Examine and interpret optimization results, including load and trip distances. • Create and execute a batch of scenarios from multiple projects.	1.5 hours
06: Data Validation	After completing this lesson, learners will be able to: • Explain the significance of data validation in ensuring effective modeling outcomes. • Describe the data validation techniques to assess and improve the accuracy of model inputs.	2 hours

07: Managing Data	After completing this lesson, learners will be able to: • Configure a basic model using the solver engine for optimization. • Evaluate the results from the optimization process. • Analyze the log and output data and identify areas for improvement. • Design multiple scenarios to compare outcomes and deduce the best modeling strategies.	1.5 hours
08: Location Constraints	After completing this lesson, learners will be able to: • Define location constraints in Transportation Modeling. • Describe the elements required to set location constraints.	1 hour
09: Setting Up Location Constraints	After completing this lesson, learners will be able to: • Create and assign business hours to various locations within a model. • Apply loading and unloading restrictions to specific location types in a transportation model. • Calculate handling times. • Evaluate routing restrictions for stops that must be first or last on a load. • Create transit override scenarios to reflect actual distances and transit times between locations. • Manage exceptions to regular business hours.	1.5 hours
10: Adding a Hub	After completing this lesson, learners will be able to: • Define a hub in Transportation Modeling. • Add a new hub to the transportation model. • Create and assign business hours to a newly added hub. • Analyze how incorporating a hub affects the optimization of the transportation model. • Create a hub scenario that maximizes load consolidation and efficiency in freight movement. • Visualize hubs and associated loads on a map.	1 hour

11: Introduction to Shipment Grouping and Ordering	After completing this lesson, learners will be able to: • Define shipment grouping and ordering in Transportation Modeling. • Describe the role of shipment grouping and ordering in optimization.	1 hour
12: Shipment Grouping and Ordering	After completing this lesson, learners will be able to: • Add new shipments to the shipment detail table. • Force direct delivery of shipments to their destination. • Apply Merge in Transit concept to shipments that can be combined for simultaneous delivery. • Utilize consolidation classes for shipments of same characteristics. • Explain how location group exclusions can prevent unwanted combinations of locations on a load.	1.5 hours
13: Tariff Strategy	After completing this lesson, learners will be able to: • Define the structure and components of a tariff. • Determine the most cost-effective carrier services considering various constraints.	1 hour
14: Configuring Tariff Strategy	After completing this lesson, learners will be able to: • Create tariff components in the access rating tool. • Evaluate the effectiveness of different tariff strategies in achieving transportation optimization. • Apply lane-specific tariff rates to real-world transportation scenarios. • Analyze delivery schedules and associated itineraries.	2 hours
15: Delivery Schedules	After completing this lesson, learners will be able to: • Describe delivery schedules and their significance in Transportation Modeling. • Create a detailed delivery schedule using access rating tool. • Differentiate between different types of delivery schedules. • Analyze the impact of delivery scheduling on freight movement across multiple transportation modes. • Modify existing delivery schedules and assess their impact on logistics efficiency. • Evaluate delivery schedule components.	2 hours

16. Introduction to Strategies and Parameters	After completing this lesson, learners will be able to: • Identify the components and functions within a strategy file. • Identify the different global parameters. • Describe the functions of the parameter file. • Describe how the optimizer utilizes the optimizer plan hierarchy.	2 hours
17. Configuring Strategies and Parameters	After completing this lesson, learners will be able to: • Edit a strategy file using the strategy file editor. • Analyze the impact of changing global parameters within the parameter file. • Create a custom strategy file using the strategy file editor. • Incorporate functions such as plan stack and log functions in the strategy file. • Evaluate the effectiveness of different plan comparison functions. • Apply constraint functions to enforce constraints during optimization. • Examine the role of web rule functions. • Critique different strategies and recommend improvements based on objectives and constraints.	2 hours
18: Modeling Carrier Equipment Availability Constraints	After completing this lesson, learners will be able to: • List the three distinct levels at which carrier equipment availability can be modeled. • Describe how constraints interact with the tariff hierarchy. • Apply the optimization parameters to control distance and transit time behavior in modeling scenarios. • Analyze the impact of lane-level constraints on enforcing carrier equipment availability. • Calculate transit times considering traffic patterns. • Evaluate the effectiveness of penalties applied when constraints are violated. • Assess how penalties can affect the cost and feasibility of transportation plans.	2 hours

19: Continuous Move Modeling	After completing this lesson, learners will be able to: • Define continuous moves in the context of Transportation Modeling. • Explain how individual loads are linked. • Configure carrier and tariff settings effectively to facilitate continuous move modeling. • Utilize Rank parameter to prioritize trip consolidation by cost or distance savings. • Analyze the impact of different trip configurations on the efficiency and cost-effectiveness of continuous move models. • Assess strategies to minimize empty miles while maximizing asset utilization.	1.5 hours
20: Reporting Optimization Metrics	After completing this lesson, learners will be able to: • Define optimization metrics and list their primary purposes in Transportation Modeling. • Describe the process of configuring optimization metrics. • Explain the functions of different reports generated postoptimization. • Access and use the optimization metric detail table to view and analyze transport data metrics. • Apply the chart option to visualize optimization metrics for comparison between multiple transportation plans.	1 hour

Hands-on Exercises: This course contains hands-on exercises for practicing the tasks covered in the lessons.

5262: Transportation Modeler Level I

Course Objectives

After completing this course, learners will be able to:

- Describe Transportation Modeler and its features.
- Navigate through Transportation Modeler user interface, utilizing its functionalities.
- Create and optimize starter models.
- Define scenarios, verify data, and configure solver options.
- Apply location constraints and add business hours, routing, and transit overrides.
- Incorporate hubs into models.
- Develop a tariff strategy using the access rating tool.
- Design delivery schedules to streamline transportation planning.
- Evaluate different strategies and parameters to optimize solve results.
- Model continuous moves using strategy files and the access rating tool.
- Explain the functions of different reports generated postoptimization.

Audience

Transportation Modeler project team and IT members

Prerequisites

No prerequisites are required for this course.

Duration

4 days (in person or virtual)

Training Level

Intermediate and advanced

Lesson Name	Learning Objectives	Duration
01: Transportation Modeler Overview	After completing this lesson, learners will be able to: • Identify the business benefits of Transportation Modeler. • Describe the key components of Transportation Modeler. • Explain transportation modeling techniques to create an optimized transportation plan that balances cost and service. • Compare different transportation scenarios.	1 hour

02: Transportation Modeler User Interface	After completing this lesson, learners will be able to: • Explain the basic functionalities of various pages and tables within Transportation Modeler. • Navigate through Detail Table to filter, import, export, and manipulate data. • Assess input and output data of solved scenarios. • Create entity relationships and attributes to categorize data.	1 hour
03: Building a Starter Model	After completing this lesson, learners will be able to: • Build a starter model by providing information on locations, shipments, geocodes, and map zones. • Analyze the role of entities, relationships, and attributes. • Create a scenario in Transportation Modeler. • Evaluate the effectiveness of a starter model by interpreting import results. • Identify errors using error logs. • Configure geocoding of location data to provide latitude and longitude coordinates. • Use the road map feature to view locations, shipments, loads, and trips.	2 hours
04: Introduction to Optimizing a Starter Model	After completing this lesson, learners will be able to: • Define optimization in the context of Transportation Modeler. • Describe the data requirements for performing optimization. • Demonstrate various data validation techniques to ensure data accuracy and readiness for optimization.	1 hour
05: Optimizing a Starter Model	After completing this lesson, learners will be able to: • Configure and optimize a starter model using the solver engine. • Adjust strategic parameters as necessary. • Analyze the optimization log and output summary to evaluate the effectiveness of optimization strategies. • Examine and interpret optimization results, including load and trip distances. • Create and execute a batch of scenarios from multiple projects.	1.5 hours

06: Data Validation	After completing this lesson, learners will be able to: • Explain the significance of data validation in ensuring effective modeling outcomes. • Describe the data validation techniques to assess and improve the accuracy of model inputs.	2 hours
07: Managing Data	After completing this lesson, learners will be able to: • Configure a basic model using the solver engine for optimization. • Evaluate the results from the optimization process. • Analyze the log and output data and identify areas for improvement. • Design multiple scenarios to compare outcomes and deduce the best modeling strategies.	1.5 hours
08: Location Constraints	After completing this lesson, learners will be able to: • Define location constraints in Transportation Modeler. • Describe the elements required to set location constraints.	1 hour
09: Setting Up Location Constraints	After completing this lesson, learners will be able to: • Create and assign business hours to various locations within a model. • Apply loading and unloading restrictions to specific location types in a transportation model. • Calculate handling times. • Evaluate routing restrictions for stops that must be first or last on a load. • Create transit override scenarios to reflect actual distances and transit times between locations. • Manage exceptions to regular business hours.	1.5 hours
10: Adding a Hub	After completing this lesson, learners will be able to: • Define a hub in Transportation Modeler. • Add a new hub to the transportation model. • Create and assign business hours to a newly added hub. • Analyze how incorporating a hub affects the optimization of the transportation model. • Create a hub scenario that maximizes load consolidation and efficiency in freight movement. • Visualize hubs and associated loads on a map.	1 hour

11: Introduction to Shipment Grouping and Ordering	After completing this lesson, learners will be able to: • Define shipment grouping and ordering in Transportation Modeler. • Describe the role of shipment grouping and ordering in optimization.	1 hour
12: Shipment Grouping and Ordering	After completing this lesson, learners will be able to: • Add new shipments to the shipment detail table. • Force direct delivery of shipments to their destination. • Apply Merge in Transit concept to shipments that can be combined for simultaneous delivery. • Utilize consolidation classes for shipments of same characteristics. • Explain how location group exclusions can prevent unwanted combinations of locations on a load.	1.5 hours
13: Tariff Strategy	After completing this lesson, learners will be able to: • Define the structure and components of a tariff. • Determine the most cost-effective carrier services considering various constraints.	1 hour
14: Configuring Tariff Strategy	After completing this lesson, learners will be able to: • Create tariff components in the access rating tool. • Evaluate the effectiveness of different tariff strategies in achieving transportation optimization. • Apply lane-specific tariff rates to real-world transportation scenarios. • Analyze delivery schedules and associated itineraries.	2 hours
15: Delivery Schedules	After completing this lesson, learners will be able to: • Describe delivery schedules and their significance in Transportation Modeler. • Create a detailed delivery schedule using access rating tool. • Differentiate between different types of delivery schedules. • Analyze the impact of delivery scheduling on freight movement across multiple transportation modes. • Modify existing delivery schedules and assess their impact on logistics efficiency. • Evaluate delivery schedule components.	2 hours

16: Strategies and Parameters	After completing this lesson, learners will be able to: • Identify the components and functions within a strategy file. • Identify the different global parameters. • Describe the functions of the parameter file. • Describe how the optimizer utilizes the optimizer plan hierarchy.	2 hours
17: Configuring Strategies and Parameters	After completing this lesson, learners will be able to: • Edit a strategy file using the strategy file editor. • Analyze the impact of changing global parameters within the parameter file. • Create a custom strategy file using the strategy file editor. • Incorporate functions such as plan stack and log functions in the strategy file. • Evaluate the effectiveness of different plan comparison functions. • Apply constraint functions to enforce constraints during optimization. • Examine the role of web rule functions. • Critique different strategies and recommend improvements based on objectives and constraints.	2 hours
18: Carrier Equipment Availability Constraints	After completing this lesson, learners will be able to: • List the three distinct levels at which carrier equipment availability can be modeled. • Describe how constraints interact with the tariff hierarchy. • Apply the optimization parameters to control distance and transit time behavior in modeling scenarios. • Analyze the impact of lane-level constraints on enforcing carrier equipment availability. • Calculate transit times considering traffic patterns. • Evaluate the effectiveness of penalties applied when constraints are violated. • Assess how penalties can affect the cost and feasibility of transportation plans.	2 hours

19: Continuous Move Modeling	After completing this lesson, learners will be able to: • Define continuous moves in the context of Transportation Modeler. • Explain how individual loads are linked. • Configure carrier and tariff settings effectively to facilitate continuous move modeling. • Utilize Rank parameter to prioritize trip consolidation by cost or distance savings. • Analyze the impact of different trip configurations on the efficiency and cost-effectiveness of continuous move models. • Assess strategies to minimize empty miles while maximizing asset utilization.	1.5 hours
20: Reporting Optimization Metrics	After completing this lesson, learners will be able to: • Define optimization metrics and list their primary purposes in Transportation Modeling. • Describe the process of configuring optimization metrics. • Explain the functions of different reports generated postoptimization. • Access and use the optimization metric detail table to view and analyze transport data metrics. • Apply the chart option to visualize optimization metrics for comparison between multiple transportation plans.	1 hour

Hands-on Exercises: This course contains hands-on exercises for practicing the tasks covered in the lessons.

5265: Transportation Modeler Level II

Course Objectives

After completing this course, learners will be able to:

- Describe Transportation Modeler's advanced functions and entities.
- Illustrate the advanced modeling techniques.
- Configure penalties in carrier equipment availability.
- Describe how domiciles and equipment types are modeled to reduce cost.
- Describe equipment type associations and model tractors and trailers.
- Describe and model dock scheduling.
- Configure performance-based ratings for optimizing load assignments.
- Apply dynamic shipment splitting techniques to improve modeling flexibility.
- Utilize containerization and axle balancing to manage capacity.

Audience

Transportation Modeler project team and IT members

Prerequisites

NA

Duration

3 days (in person or virtual)

Training Level

Advanced

Lesson Name	Learning Objectives	Duration
01: Introduction	After completing this lesson, learners will be able to: • Review the topics covered in the Level I course. • Describe Transportation Modeler's advanced functions and entities. • Describe advanced relationships required for Transportation Modeler.	1.5 hours
02: CEA Recap	After completing this lesson, learners will be able to: • Describe how penalties are used in modeling carrier equipment availability. • Configure carrier equipment availability. • Set up penalty structures. • Test constraint scenarios.	1 hour

03: Introduction to Domicile Modeling	After completing this lesson, learners will be able to: • Define domiciles. • Explain the significance of domicile modeling in Transportation Modeler.	1 hour
04: Domicile Modeling	After completing this lesson, learners will be able to: • Set up domicile constraints. • Describe rating requirements for modeling domiciles. • Identify the strategies used to reduce domicile penalty costs. • Describe how domicile vehicles are modeled.	2 hours
05: Introduction to Tractor and Trailer Modeling	After completing this lesson, learners will be able to: • Explain the role of trailer swapping and empty loads in Transportation Modeler. • Describe equipment type associations at domiciles. • Define tractors and trailers in Transportation Modeler.	1.5 hour
06: Tractor and Trailer Modeling	After completing this lesson, learners will be able to: • Describe how tractors and trailers are modeled in Transportation Modeler. • Configure multitrailer scenarios. • Add details to various tractor and trailer configuration tables.	1.5 hours
07: Introduction to Dock Scheduling	After completing this lesson, learners will be able to: • Describe dock scheduling. • Explain the role of dock scheduling in Transportation Modeler.	1 hour
08: Dock Scheduling	After completing this lesson, learners will be able to: • Explain how to model dock scheduling. • Set up and use dock scheduling. • View the results of dock scheduling.	2 hours
09: Performance Rating	After completing this lesson, learners will be able to: • Describe the functions of performance rating in Transportation Modeler. • Explain the role of lane preference, carrier performance, and lane performance in assigning loads.	1 hour

10: Modeling Performance Rating	After completing this lesson, learners will be able to: • Enable a performance-based rating system. • Evaluate carrier and lane performance in Transportation Modeler.	1.5 hours
11: Introduction to Dynamic Shipment Splitting	After completing this lesson, learners will be able to: • Describe dynamic shipment splitting in Transportation Modeler. • Explain the methods and rules of dynamic shipment splitting.	1.5 hours
12: Modeling Dynamic Shipment Splitting	After completing this lesson, learners will be able to: • Define the various shipment splitting strategies in Transportation Modeler. • Enable dynamic shipment splitting.	1 hour
13: Introduction to Containerization and Axle Balancing	After completing this lesson, learners will be able to: • Describe containerization, product packaging, and capacity degradation in Transportation Modeler. • Describe axle balancing and its role in Transportation Modeler.	2 hours
14: Containerization and Axle Balancing: Constraints and Parameters	After completing this lesson, learners will be able to: • Explain the containerization parameters that are used to control the load configurator verification. • Describe the containerization constraints impacting optimization in Transportation Modeler. • Describe the product loading factor and product loading detail percentage. • Calculate the product loading detail percentage and percentage utilization factor for the equipment used.	2 hours

Hands-on Exercises: This course contains hands-on exercises for practicing the tasks covered in the lessons.

5285: Transportation Planner

Course Objectives

After completing this course, learners will be able to:

- Describe the business benefits and configuration needs in Transportation Planner.
- Customize the Transportation Planner interface.
- Describe the Transportation Planner rich Internet application benefits and functions.
- Execute and manage optimization requests.
- Plan and edit trips and loads.
- Apply and adjust optimization strategies using strategy file editor.
- Model carrier equipment constraints domicile vehicle availability.
- Configure dock scheduling based on operational constraints.
- Create and customize charts for visualizing transportation planning data.

Audience

Transportation Planner project team and IT members

Prerequisites

No prerequisites are required for this course.

Duration

2 days (in person or virtual)

Training Level

Intermediate and advanced

Lesson Name	Learning Objectives	Duration
01: Overview	After completing this lesson, learners will be able to: • Describe the business benefits and capabilities of Transportation Planner. • Identify the types of users and their roles in Transportation Planner.	1 hour
02: Navigation	After completing this lesson, learners will be able to: • Navigate through the different pages of Transportation Planner user interface. • Customize grid views. • Customize the navigation pane. • Manage customized views. • Export data to Excel.	2 hours

03: TP Rich Internet Application (TPRIA)	After completing this lesson, learners will be able to: • Explain the benefits of TPRIA. • Describe the functionalities available in the Server, Parameters/Strategies, Request, and Monitor pages.	1 hour
04: Processing Optimization Requests	After completing this lesson, learners will be able to: • Process Transportation Manager requests and plans. • Send an optimization request to Transportation Planner from Transportation Manager. • Optimize loads in Transportation Planner. • Optimize and view requests. • Edit existing loads and trips associated with a request.	2 hours
05: Strategies and Parameters	After completing this lesson, learners will be able to: • Describe the role of strategies and parameters in Transportation Planner. • Describe the strategy file structure. • Define the components of optimizer plan hierarchy. • Explain the key optimization strategies used by Transportation Planner.	2 hours
06: Configuring Strategies and Parameters	After completing this lesson, learners will be able to: • Edit and adjust strategies using the strategy file editor. • Set up arguments and functions. • Apply load building, load improvement, and hub strategies for existing shipments. • Configure strategy file parameters. • Create custom optimization rules. • Test strategy scenarios.	2 hours
07: Modeling Carrier Equipment Availability Constraints	After completing this lesson, learners will be able to: • Describe the carrier equipment availability modeling technique. • Enable constraints at various levels. • Explain how to model domicile vehicle availability. • Apply capacity restrictions.	2 hours
08: Modeling Dock Scheduling	After completing this lesson, learners will be able to: • Explain the significance of dock scheduling in Transportation Planner. • Explain how to model dock scheduling considering various dock-related constraints. • Explain how to enable dock scheduling. • View the dock schedule output.	1 hour

09: Working with Charts	After completing this lesson, learners will be able to: • Create the Metrics page. • Customize how the data is displayed on the Metrics page. • Configure Gantt charts.	1 hour

Hands-on Exercises: This course contains hands-on exercises for practicing the tasks covered in the lessons.


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