
IBM Sterling Order Management System: Extending the Application

Durée: 4 Jours **Réf de cours: 6F144G** **Méthodes d'apprentissage: Virtual Learning**

Résumé:

This course introduces learners to the technical framework of the Sterling Order Management application. It covers how to customize the application to meet specific business requirements and provides an overview of the technical architecture of the system, including installation and deployment.

The course deep dives into the concepts of extending transaction workflows, fulfillment pipelines, and transferring data between applications. Learners will discover how to create, extend, and customize agents, agent servers, APIs, and services. Additionally, the course explores database extensibility, object extensibility, presentation framework, and customization of the Sterling Order Management System user interface.

Mis à jour 3/1/2025

Public visé:

This course is designed to train IBM Sterling Order Management System developers, implementers, and technical architects.

Objectifs pédagogiques:

- After completing this course, learners should be able to:
 - Understand the technical environment of the Sterling Order Management System.
 - Extend transaction workflows and fulfillment pipelines.
 - Use Sterling Order Management APIs to transfer data between Sterling Order Management System and other applications.
 - Create new agents and agent servers.
 - Configure services.
 - Customize the user interface, database, printed documents, and objects.
 - Extend application screens using the Web UI Framework.
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Contenu:

Unit 1: Introduction

This unit provides you a high-level overview of the architecture of the IBM® Sterling Order Management system.

Lesson 1.1 : Introduction to Application Architecture

- Discuss the footprint of the Sterling Order Management system.
- Identify the various components of Sterling Order Management.
- List the frameworks that are part of Sterling Order Management.
- Identify the user interfaces of the Sterling Order Management system.

Exercise 1.1.1 : Launching User Interfaces

- Launch various application screens present in the Sterling Order Management system.

Unit 2: Installation and Deployment

This unit provides you information about installation, configuration, and deployment of IBM Sterling Order Management.

Lesson 2.1 : Introduction to Application Architecture

- Identify the prerequisites for installing the Sterling Order Management.
- Differentiate between single schema and multi-schema installations.
- Learn about Shards and Colonies.
- Understand different types of deployment.
- Install the Sterling Order Management in silent mode.
- Install the Sterling Sterling Order Management in GUI mode.
- Process to enable sharding in multi-schema installation.
- Configure the Sterling Order Management and the supporting Application Server and database components.
- Create the 'Factory Setup' base data set.
- Configure the property files.

Exercise 2.1.1 : Viewing the Directory Structure

- Navigate and view the installation directory.
- View the Liberty server directory.

Exercise 2.1.2 : Viewing Property Files and Fulfillment Architecture

- Navigate to the properties folder in the

Lesson 4.1 : Agent Framework

- Differentiate between Task Queue and Non-Task Queue Based Agents.
- Explain the Agent Framework architecture.
- Create an agent's infrastructure.
- Start an agent server.
- Trigger an agent.
- Schedule an agent to trigger.
- List the best practices when working with agents.

Exercise 4.1.1 : Viewing the YFS_TASK_Q Table

- Connect to the database and view the YFS_TASK_Q table.

Exercise 4.1.2 : Verifying the JMS Service

- Navigate to MQ Manager and start the queue manager and listener.

Exercise 4.1.3 : Viewing the Agent Criteria Details

- View the agent criteria details.

Exercise 4.1.4 : Configure Agents

- Configure an agent server.

Exercise 4.1.5 : Configure Agent Criteria Settings

- Configure and trigger an agent server.

Unit 5: Service Definition Framework

This unit provides an overview of the Service Definition Framework in the Sterling Order Management system. This unit also details the procedure to create and configure a service using the Service Builder graphical interface.

Lesson 5.1 : Service Definition Framework

- Create reusable business services using the Service Builder.
- Integrate with external systems using services.
- Invoke APIs via services.
- Implement services via synchronous and asynchronous protocols.
- Invoke services via integration servers in the runtime environment.
- Handle exceptions that are logged by the Service Definition Framework using the exception console.

Exercise 6.1.2 : Database Extensibility

- Create a custom table and a hang-off table.

Lesson 6.2 : Object Extensibility

- Configure Object Extensibility.

Exercise 6.2.1 : Add an Extensible Attribute

- Create an extensible attribute.

Unit 7: Presentation Framework

This unit describes information about how to use the Presentation Framework to create unique User-View associations, modify existing UI screens, and create new UI screens.

Lesson 7.1 : Presentation Framework

- Describe the Presentation Framework architecture.
- Identify the Application Console screen elements.
- Work with UI resources to customize screen layout and behavior.
- Change the basic look and feel of the Application Console by using menus, themes, and logos.

Exercise 7.1.1 : Viewing the Order Entity

- View the various resources that form an entity.

Exercise 7.1.2 : Associating an User with a View

- Create a view for a specific user.

Exercise 7.1.3 : Presentation Framework

- Build custom console screens to meet the requirements of the organization.

Unit 8: Web UI Framework

This unit provides a brief overview about the framework on which Sterling Business Center and Sterling Field Sales are developed. It also provides detailed procedure on how to extend these applications.

Lesson 8.1 : Web UI Framework

- The underlying framework of Sterling

installation directory.

- View the DB Name and other details pertaining to the database.

Lesson 2.2 : Deploying the Application

- Describe a typical deployment environment.
- Deploy the application in production mode.
- Deploy the application in exploded mode.
- Pre-compile the JSPs.
- Understand promising server and its implementation.
- Configure and use the Configuration Deployment tool.
- Overview of Initial Data Loading tool.

Unit 3: APIs and Custom Business Logic

This unit provides you with conceptual and procedural information to work with APIs provided by IBM Sterling Order Management system.

Lesson 3.1 : APIs and Custom Business Logic

- Describe the Process Modeling terms briefly.
- Identify the system APIs.
- Determine API behavior via the API Java documentation.
- Modify output template XML.
- Use the API Tester to invoke APIs.
- Deploy custom Java classes.
- Extend standard transactions by using User Exits.
- Configure custom transactions.
- Extend transaction events.
- Extend statuses.

Exercise 3.1.1 : Using Order Console

- Create an order using the order console in Application Console.

Exercise 3.1.2 : Using API Documentation

- Navigate to and use the API documentation in the application directory.

Exercise 3.1.3 : Using the API Tester

- Use the API tester to create an order.

Exercise 3.1.4 : Modifying XML Template

- Modify a standard output XML and retrieve specific details using the API tester.

Exercise 3.1.5 : Configuring User Exits

- Configure and test a user exit.

Unit 4: Agent Framework

Exercise 5.1.1 : Create a Service

- Create a service using Service Builder and execute a service.

Exercise 5.1.2 : Event Handling

- Create, test and execute a service that provides order alerts.

Exercise 5.1.3 : Order Capture Integration

- Create a service that allows external order entry system to pass an XML.

Exercise 5.1.4 : Create an Order

- Create a service that reads an xml file from the JMS queue, to create order.

Exercise 5.1.5 : Exception Handling

- Identify and resolve exceptions in the console.

Exercise 5.1.6 : Rapid Deployment Tool/ Troubleshooting

Use the RDT tool to load items to the organization catalog.

Unit 6: Extensibility

This unit provides information on how to extend the database by adding new columns and table to the IBM Sterling Selling and Fulfillment Foundation data model. You will also learn about the configuring object extensibility in the IBM Sterling Business Center.

Lesson 6.1 : Database Extensibility

- List the restrictions on extending the database.
- Explain the Entity Definition Framework.
- Use Entity Relationship Diagrams to view the Sterling Order Management system entity relationship mapping.
- List the steps to extend the database to meet implementation needs.
- Extend database entities by creating custom columns, custom tables, and hang-off tables.
- Create the Extension.xml file.
- Modify API XMLs to accommodate database changes.
- Create the Entities.jar.
- Create services to call Extended Database APIs.

Business Center and Sterling Field Sales.

- Web UI Framework and its components such as screens, mashups, and struts.
- Loading of screens and pages, and the data flow.
- Extensibility in terms of extending a screen and the required components.

Exercise 8.1.1 : Setting up Extensibility Environment

- Launch the Extensibility Workbench in the Sterling Business Center application.

Exercise 8.1.2 : Web UI Extensibility

- Creating a new screen in SBC using Designer Workbench.

Unit 9: Case Study

This unit provides a scenario-based case study to reinforce the concepts. The process to extend the database by adding a custom column is explained in detail. Additionally, you modify the UI screens to display and populate this new column.

Lesson 9.1 : Case Study

- Create a custom column
- Modify the UI screens to display and populate a new column

Course Wrap Up

- Explain how the course met its learning objectives.
- Submit an evaluation of the class.
- Identify other IBM Education courses related to this topic.
- Locate appropriate resources for further study.

This unit describes overview of agent architecture. The process to set up the agent architecture, schedule, and call an agent is described in detail.

Exercise 6.1.1 : Viewing ERDs

- View the ERDs available in the standard documentation.

Méthodes pédagogiques :

Un support de cours officiel sera fourni aux participants.

Autres moyens pédagogiques et de suivi:

- Compétence du formateur : Les experts qui animent la formation sont des spécialistes des matières abordées et ont au minimum cinq ans d'expérience d'animation. Nos équipes ont validé à la fois leurs connaissances techniques (certifications le cas échéant) ainsi que leur compétence pédagogique.
- Suivi d'exécution : Une feuille d'émargement par demi-journée de présence est signée par tous les participants et le formateur.
- En fin de formation, le participant est invité à s'auto-évaluer sur l'atteinte des objectifs énoncés, et à répondre à un questionnaire de satisfaction qui sera ensuite étudié par nos équipes pédagogiques en vue de maintenir et d'améliorer la qualité de nos prestations.

Délais d'inscription :

- Vous pouvez vous inscrire sur l'une de nos sessions planifiées en inter-entreprises jusqu'à 5 jours ouvrés avant le début de la formation sous réserve de disponibilité de places et de labs le cas échéant.
- Votre place sera confirmée à la réception d'un devis ou ""booking form"" signé. Vous recevrez ensuite la convocation et les modalités d'accès en présentiel ou distanciel.
- Attention, si cette formation est éligible au Compte Personnel de Formation, vous devrez respecter un délai minimum et non négociable fixé à 11 jours ouvrés avant le début de la session pour vous inscrire via moncompteformation.gouv.fr.

Accueil des bénéficiaires :

- En cas de handicap : plus d'info sur globalknowledge.fr/handicap
- Le Règlement intérieur est disponible sur globalknowledge.fr/reglement