ETL Tools (Talend/SSIS) for ERP Integrations Training Course

Professional Development Training Course Outline

Category	Enterprise Resource Planning (ERP)	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today's dynamic business environment, seamless integration of Enterprise Resource Planning (ERP) systems with various data sources is crucial for streamlined operations. ETL (Extract, Transform, Load) tools like Talend and SQL Server Integration Services (SSIS) are at the forefront of facilitating efficient data integration processes, enabling businesses to make data-driven decisions. ETL Tools (Talend/SSIS) for ERP Integrations Training Course is designed to equip professionals with the skills needed to leverage ETL tools for integrating ERP systems with other business applications, ensuring data accuracy, consistency, and timely availability across platforms.

The ETL Tools for ERP Integration training will delve into the core concepts and practical applications of Talend and SSIS, empowering participants to efficiently manage large datasets and integrate ERP solutions seamlessly. By utilizing case studies, hands-on exercises, and real-world scenarios, the course will provide learners with in-depth knowledge of data mapping, transformation techniques, error handling, and scheduling of ETL processes, making them proficient in leveraging these tools to solve complex integration challenges.

Programme Curriculum

ETL Tools (Talend/SSIS) for ERP Integrations Training Course

Introduction

In today's dynamic business environment, seamless integration of Enterprise Resource Planning (ERP) systems with various data sources is crucial for streamlined operations. ETL (Extract, Transform, Load) tools like Talend and SQL Server Integration Services (SSIS) are at the forefront of facilitating efficient data integration processes, enabling businesses to make data-driven decisions. ETL Tools (Talend/SSIS) for ERP

Integrations Training Course is designed to equip professionals with the skills needed to leverage ETL tools for integrating ERP systems with other business applications, ensuring data accuracy, consistency, and timely availability across platforms.

The ETL Tools for ERP Integration training will delve into the core concepts and practical applications of Talend and SSIS, empowering participants to efficiently manage large datasets and integrate ERP solutions seamlessly. By utilizing case studies, hands-on exercises, and real-world scenarios, the course will provide learners with in-depth knowledge of data mapping, transformation techniques, error handling, and scheduling of ETL processes, making them proficient in leveraging these tools to solve complex integration challenges.

Course Duration

10 days

Course Objectives

1. Master the fundamentals of ETL processes with Talend and SSIS to enable seamless ERP integrations.
2. Understand the data extraction, transformation, and loading techniques for optimized ERP system performance.
3. Explore the integration of ERP systems with external databases, cloud platforms, and third-party applications.
4. Implement data mapping, transformation, and cleansing strategies to ensure data consistency across the system.
5. Learn how to automate ETL processes using Talend job design and SSIS package creation.
6. Develop a solid understanding of error handling and logging techniques in ETL workflows.
7. Build scalable and high-performance ETL pipelines for real-time data processing.
8. Gain proficiency in scheduling and orchestrating ETL jobs for continuous ERP data integration.
9. Explore advanced transformation functions in both Talend and SSIS.
10. Create and implement data quality checks to maintain integrity in ERP integrations.
11. Understand the security considerations and best practices for ETL data transfer in ERP systems.
12. Learn the methods for monitoring and optimizing ETL workflows to minimize downtime and bottlenecks.
13. Study industry-specific case studies of ERP integration using ETL tools to understand practical challenges and solutions.

Target Audience

1. Data Engineers and Data Architects
2. ERP System Administrators
3. Business Intelligence Developers
4. IT Professionals involved in data integration
5. System Integrators
6. Data Analysts
7. Database Administrators
8. Developers working with Talend, SSIS, and ERP systems

Course Modules

Module 1: Introduction to ETL Tools for ERP Integration

- Overview of ETL processes and their importance
- Introduction to Talend and SSIS

- Key features and differences between Talend and SSIS
- Benefits of using ETL for ERP integrations
- Case Study: Integrating ERP with third-party CRM using Talend

Module 2: Data Extraction Techniques

- Connecting to ERP databases
- Handling various data sources
- Filtering and selecting data for extraction
- Managing large datasets efficiently
- Case Study: Extracting large product catalogs from ERP systems using SSIS

Module 3: Data Transformation Strategies

- Data cleansing techniques
- Handling data inconsistencies
- Writing complex transformations in Talend and SSIS
- Working with lookups and joins in transformations
- Case Study: Transforming sales data before loading into ERP using Talend

Module 4: Loading Data into ERP Systems

- Data loading methods
- Bulk data insertion techniques
- Managing constraints and validation rules
- Handling data conflicts during loading
- Case Study: Loading customer information into an ERP system using SSIS

Module 5: Advanced ETL Processing with Talend

- Creating reusable components in Talend
- Managing complex data transformations
- Integrating Talend with cloud-based ERP systems
- Using Talend for real-time data integration
- Case Study: Real-time integration of ERP data with Talend

Module 6: SSIS Advanced Features for ERP Integrations

- Working with Data Flow and Control Flow in SSIS
- Error handling and logging in SSIS packages
- Automating SSIS package execution using SQL Server Agent
- Performance tuning of SSIS packages
- Case Study: Automating data extraction from ERP systems using SSIS

Module 7: Error Handling and Logging in ETL Processes

- Techniques for error trapping in Talend and SSIS
- Error notification and alert mechanisms
- Building custom error-handling routines
- Logging best practices for ETL processes
- Case Study: Error resolution in data loading from ERP systems

Module 8: Scheduling and Automation of ETL Jobs

- Scheduling and orchestrating ETL jobs
- Automating ETL workflows with Talend and SSIS
- Trigger-based automation techniques
- Monitoring and alerting on job failures
- Case Study: Automating payroll data extraction from ERP using SSIS

Module 9: Data Quality Assurance for ERP Integrations

- Implementing data validation and cleansing techniques
- Using Talend and SSIS for data profiling
- Ensuring data accuracy and consistency
- Designing rules for data quality assurance
- Case Study: Ensuring financial data integrity between ERP and CRM systems

Module 10: Security and Compliance in Data Integration

- Data encryption and secure transfer techniques
- Compliance with industry regulations (GDPR, HIPAA)
- User authentication and authorization mechanisms
- Auditing and data security best practices
- Case Study: Securing healthcare data during ERP integration

Module 11: Monitoring and Optimizing ETL Workflows

- Performance tuning of ETL pipelines
- Using Talend and SSIS performance counters
- Identifying and resolving performance bottlenecks
- Techniques for monitoring large-scale data transfers
- Case Study: Optimizing sales reporting data integration from ERP

Module 12: Real-Time Data Integration with ETL Tools

- Implementing change data capture (CDC) in Talend and SSIS
- Real-time data streaming techniques
- Integrating ETL with cloud-based ERP solutions
- Ensuring data consistency in real-time scenarios
- Case Study: Real-time data sync between ERP and customer service platform

Module 13: Best Practices for ERP Data Integration

- Ensuring scalability in data integration projects
- Designing maintainable ETL workflows
- Error management and contingency planning
- Optimizing data pipeline architectures
- Case Study: Best practices in an enterprise-wide ERP integration project

Module 14: Talend vs. SSIS: Which One to Choose?

- Pros and cons of Talend for ERP integration
- Pros and cons of SSIS for ERP integration

- Decision-making framework for tool selection
- Case Study: Comparative study of Talend and SSIS for ERP data loading

Module 15: Industry Applications and Use Cases

- Integrating ERP with CRM and eCommerce platforms
- Real-time data processing for financial transactions
- Healthcare ERP integration for patient data synchronization
- Manufacturing ERP integration with supply chain systems
- Case Study: Integrating SAP ERP with an external CRM system using Talend

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com