WSO2 Training Catalog

Effective March 2014

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Overview

This document helps you answer the following:

- Which courses should I take?
- What does each course cover?
- How does training match up to my project timeline?
- What is the difference between standard (public) courses and custom courses?

Need more information? Please contact us at wso2.com/contact.

Terms and Conditions

The fine print:

- Training is priced on a per-person-per-day basis. Please refer to the WSO2 Pricelist.
- Training engagements are limited to a maximum of 10 attendees per day.
- Admin Fees includes T&E for one consultant.
- For custom training, pricing will vary depending on customization of training materials, training environments and hands-on exercises.
- Training courses cannot be recorded unless you secure explicit permission from WSO2.
- Duration of you training engagement may vary, depending on which courses are selected. To estimate your cost, duration for each course is listed in this catalog.

Standard versus Custom Training

Public Standard Training

Public training provides you with a hands-on, interactive experience with WSO2 product configuration. In these public courses, you will meet other WSO2 customers using the same products as your organization, thus giving you a broader view of product implementation and configuration. However, if you have 5+ people in your group that need training, an onsite course might be a better financial option, and if needed, we can produce a customized agenda.

When are the public courses offered?

Most of our popular courses are available according to the schedule published at www.wso2.com/training

Private Onsite Training (Standard or Custom)

Onsite Standard Training

If you're planning to train 5+ people in your group, an onsite course might be a better financial option. With onsite standard training, you can receive the exact same training from the public courses, while limiting your travel expenses. You can choose from any of the courses listed to put together your training agenda.

Onsite Custom Training is tailored to your specific needs, your systems, your data, and your processes. Our training team works with you to create an agenda that fits your immediate and long-term needs. These courses are generally ideal for late stages of the implementation, for example, just before the testing phase, prior to rollout, or even post-implementation when you are ready to tackle advanced topics. Most of these sessions are delivered as deep-dives, with emphasis on hands-on exercises that simulate the configuration you are looking to implement in future phases.

Need a private onsite course?

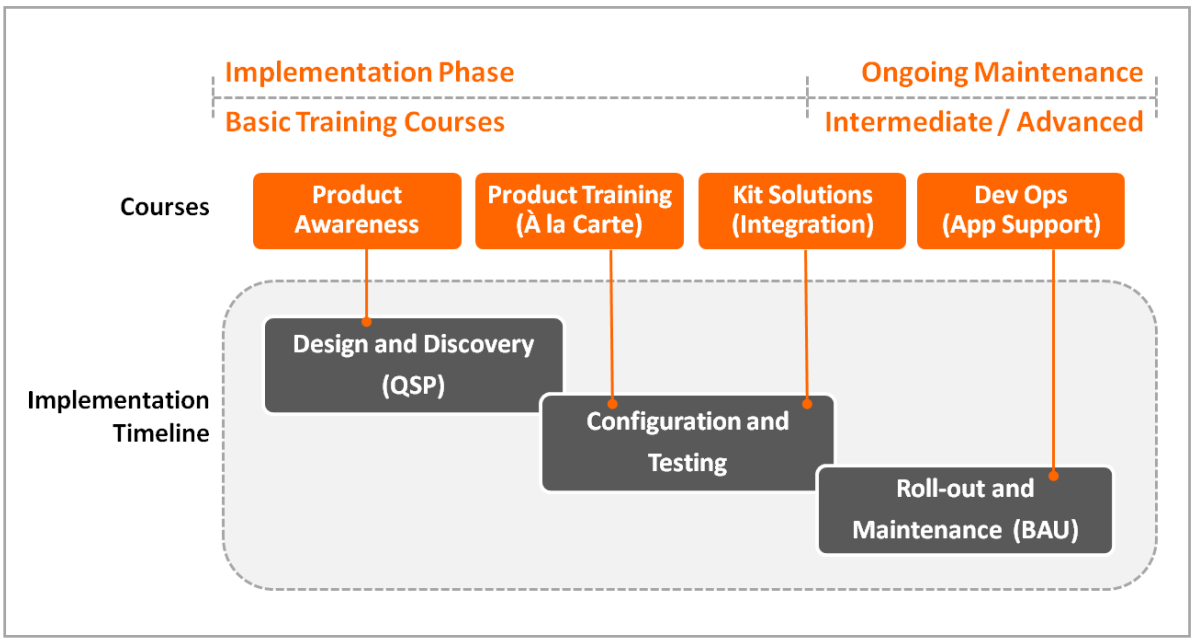
We will collaborate with you to design the appropriate agenda for a **Standard or Custom** engagement. When you are ready to discuss schedule, duration, delivery method, and scope, please contact us at wso2.com/contact.

Note that at least 8 weeks advance notice is preferred for customized courses in order to provide adequate preparation time for our instructors and to secure the best possible dates for your custom sessions.

Recommended Training Timeline

New Users

It's important that the *right training content* be delivered at *the right time* to the *right audience*. The diagram below depicts suggested timeframes during your project, and subsequent releases, where it is most beneficial to attend the specific courses. Of course, training roadmaps may vary from customer to customer depending on various project factors so we can offer recommendations based on your circumstances.



The diagram above shows when courses should be taken along the implementation timeline. We can help you build a training plan that will ensure you and your team receive the training that is appropriate to your roles and responsibilities.

Existing Users

Are you initiating a new configuration phase and could use some advanced training? Do you have new employees who need to attend training courses? Do you have employees who can benefit from taking a refresher training class? Take a look at the course descriptions and course schedule or contact WSO2 (wso2.com/contact) and we can make a training recommendation.

Courses by Role

Which course(s) should I take?

According to your role, use this table to identify which course(s) apply to your specific function. **KEY** ● = Intended Audience ○ = Optional **COURSES**	Architect	Developer	Integration Engr	Dev Ops
À la Carte Courses (Product Development)	○	●	●	○
Development Tools (App Factory, Dev Studio)	○	●	○	
Carbon Platform		○	○	●
Stratos (PaaS)		○	○	●
Custom Deep Dives	○	○	○	○

Course Descriptions - À la Carte

Advanced API Manager

WSO2 API Manager is a complete solution for publishing APIs, creating and managing a developer community and for routing API traffic in a scalable manner. It leverages integration, security and governance components from the Enterprise Service Bus, Identity Server, and Governance Registry. Powered by the Business Activity Monitor, the API Manager is ready for massively scalable deployment immediately.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	2 days
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** WSO2 ESB (recommended) **Required technical skills:** ☑ Basic understanding of WS/REST ☑ Basic understanding of Jaggery ☑ Understanding of API Economy (recommended) ☑ Understanding of WSO2 ESB (recommended)
Course Topics	▸ API Manager Overview ▸ Product Demonstration ▸ API Business Model ▸ API Lifecycle ▸ OAuth2 Reference Model for API Management ▸ Configuring Statistics for APIs ▸ Customizing API Store ▸ Extending API Management with Workflows ▸ Writing Mediation Extensions ▸ Deployment Patterns

Application Server

Your Web application is valuable to your users, and increasingly valuable to mobile applications, integration consumers, business processes, workflows, and analytics. With the WSO2 Application Server, you can easily share business logic, data, and process across the entire IT ecosystem. Application Server is Cloud Native, providing a firm foundation for hosting shared, multi-tenant, elastically scaling SaaS applications.

WSO2 Application Server brings together best of breed open source technologies for Web Applications (i.e. Apache Tomcat), Web Services (i.e. Apache Axis2), RESTful services (ie: JAX-RS) with WSO2's open source management, monitoring, clustering, and logging extensions.

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Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic Java programming experience ☑ Basic understanding of Java Application Server concepts ☑ Basic understanding of web services & related standard (SOAP, WSDL)
Course Topics	▸ Application Server Overview ▸ Product Demonstration ▸ Service Deployment with JAX-WS and JAX-RS ▸ Classloading and Classloader Runtime Environments ▸ Java WebSocket Programming ▸ Spring and Light-weight Application Development on AS ▸ Leveraging Carbon Platform Features for Web App and SaaS App Development ▸ Service and Application Activity Monitoring

Business Activity Monitor

Enterprises strive to be proactive rather than reactive to stay ahead of the game.Serving the needs of both business and IT domain experts to monitor and understand business activities within SOA and Cloud deployments, WSO2 Business Activity Monitor (BAM) is not only designed to monitor SOA metrics, but can also be configured to monitor key business indicators. Additionally, you can extend WSO2 BAM to capture other general monitoring requirements as well.

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Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic Java programming experience ☑ Basic understanding of computer networking
Course Topics	▸ Business Activity Monitor Overview ▸ Product Demonstration ▸ Hadoop(Map/Reduce, HDFS, Hive, Setting up a cluster) ▸ Cassandra (Setting up a cluster, performance tuning) ▸ Writing Custom Data Publishers ▸ Writing Custom Dashboards (JaggeryApplications, Gadgets) ▸ Event streams (Definition, Formatting) ▸ Toolbox Packaging ▸ Setting up activity monitoring for WSO2 servers

Business Process Server

Business Process Management is a key technology for increasing productivity and re-energizing businesses, making them more competitive. WSO2 Business Process Server (BPS) enables developers to easily deploy business processes written using the WS-BPEL standard, and also serves as the business process management and hosting environment for your SOA.

Powered by the Apache Orchestration Director Engine (ODE) BPEL engine, BPS provides a complete web-based graphical console to deploy, manage and view processes.

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Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic programming experience ☑ Basic understanding of XSLT ☑ Basic understanding of XML and XPATH ☑ Basic understanding of web services & related standard (SOAP, WSDL)
Course Topics	▸ Business Process Server Overview ▸ Product Demonstration ▸ BPS Architecture ▸ WS-Business Process Execution Language (WS-BPEL) ▸ WS-Human Tasks ▸ BPS Clustering ▸ BPS Best Practices ▸ Developing BPEL Processes with Developer Studio

Carbon Platform

WSO2 Carbon redefines middleware by providing an integrated and componentized middleware platform that adapts to the specific needs of any enterprise IT project - on premise or in the cloud.

100% open source and standards-based, WSO2 Carbon enables developers to rapidly orchestrate business processes, compose applications and develop services using WSO2 Developer Studio and a broad range of business and technical services that integrate with legacy, packaged and SaaS applications.

The OSGi-based platform includes more than 175 components – OSGi bundles or Carbon features. The Carbon core framework functions as "Eclipse for servers" and includes common capabilities shared by all WSO2 products, such as built-in registry, user management, transports, security, logging, clustering, caching and throttling services, coordination, and a GUI framework.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	2 days
Intended Audience	DevOps, Developer (optional), Integration Engineer (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic programming experience ☑ Understanding of OSGi ☑ Basic understanding of XML ☑ Basic understanding of web services & related standard (SOAP, WSDL)

Course Topics	▸ Carbon Overview
	▸ Product Demonstration
	▸ WSO2 Carbon Overall Architecture
	▸ Carbon Component Development Process
	  ○ Developing Components
	  ○ Developing features
	  ○ Installing features into products
	▸ Feature Provisioning onto Carbon products

Complex Event Processor

Routine business operations – a flight landed, a credit card processed, a package shipped – generate a constant stream of events. In a fast changing and competitive business climate, enterprises that monitor complex sequences of real-time events and can quickly respond to their environment by anticipating problems and flagging opportunities will have greater business advantage over their competitors.

WSO2 Complex Event Processor (CEP) identifies the most meaningful events within the event cloud, analyses their impacts, and acts on them in real time. Built to be extremely high performing and massively scalable, it offers significant time saving and affordable acquisition.

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Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic understanding of XML/XPATH
Course Topics	▸ Complex Event Processor Overview ▸ Product Demonstration ▸ CEP Configuration ▸ Integration with MB, ESB, BAM, AS ▸ Writing Execution Plans ▸ Writing Complex Queries in Siddhi

Data Services Server

Behind most application silos are heterogeneous and disparate data stores. The WSO2 Data Services Server (DSS) augments Service Oriented Architecture (SOA) development efforts by providing an easy to use platform for integrating data stores, creating composite data views, and hosting data services.

Data services provide unprecedented data access and straightforward integration with business processes, mashups, gadgets, business intelligence and mobile applications. DSS supports secure and managed data access across federated data stores, data service transactions, and data transformation and validation using a lightweight, developer friendly, agile development approach.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic Java programming experience ☑ Basic understanding of SOA (SOAP, HTTP, REST)

Course Topics	▸ Data Services Server Overview
	▸ Product Demonstration
	▸ Data Services Concepts
	  ○ Data Sources
	  ○ Queries
	  ○ Operations / Resource (REST)
	▸ Writing Custom Data Sources
	▸ Data Service Transactions
	  ○ Batch Processing
	  ○ Distributed Transactions

Advanced Enterprise Service Bus

We've taken a fresh look at old-style, centralized ESB architectures, and designed our unique WSO2 Enterprise Service Bus from the ground up as the highest performance, lowest footprint, and most interoperable SOA and integration middleware today. Relying on our innovative Carbon technology, the ESB delivers a smooth start-to-finish project experience that you cannot find anywhere else.

The feature rich and standards compliant WSO2 ESB delivers high performance within a lean footprint. For example, a deployed WSO2 ESB often fits within a 160 MB memory space.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	2 days
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic Java programming experience ☑ Basic understanding of XML, SOAP, JSON, JMS ☑ Basic understanding of web services & related standard
Course Topics	▸ ESB Overview ▸ Product Demonstration ▸ ESB in a Nutshell – Integration Basics ▸ Enterprise Integration Patterns (EIPs) ▸ RESTful/Web Service Integration ▸ Service Chaining ▸ Store and Forward (JMS, Message Stores/Processors) ▸ Domain Specific Protocol Support (SAP, HL7, FIX) ▸ ESB Performance – Non-Blocking Transport Concepts

Enterprise Store

The WSO2 Enterprise Store (ES) brings a user-friendly experience to the enterprise for accessing and managing digital assets. Development teams and business users alike can easily and rapidly discover, subscribe, and make use of various enterprise assets such as APIs, mobile apps, web apps, and services to increase productivity and better utilize available assets.

With customizable lifecycle management, IT managers will find ES be a very flexible, powerful and convenient platform to provision, manage and monitor usage of apps and services.

Social aspects of the Enterprise Store such as commenting, rating and tagging, help embrace a community of users and helps assess quality, better understand requirements and plan for future demands.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** Governance Registry (Recommended) **Required technical skills:** ☑ Basic understanding Jaggery/Caramel and JavaScript ☑ Basic understanding of HTML/CSS ☑ Basic understanding of WSO2 Governance Registry Extension Types (RXT)
Course Topics	▸ Enterprise Store Overview ▸ Product Demonstration ▸ Adding New Asset Types ▸ Customizing and Extending Publisher ▸ Customizing and Extending Store ▸ Creating Asset Lifecyles ▸ Setting up an External IDP ▸ Writing JaggeryAppsUsingCaramel

Governance Registry

Governance encompasses more than just technology; governance also includes people and processes. The WSO2 Governance Registry (GR) provides the right level of structure straight out of the box to support SOA Governance, configuration governance, development process governance, design and run-time governance, lifecycle management, and team collaboration.

Today you may have ad-hoc processes and use shared spreadsheets to register enterprise services, which is a good start. Governance Registry helps you move to the next level and fully understand the state and scope of your SOA portfolio by communicating and managing the lifecycle of your services, and by identifying and highlighting the dependencies between services and consumers.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic Java programming experience ☑ Familiarity with Eclipse IDE ☑ Basic understanding of XML ☑ Basic understanding of web services (SOAP/ WSDL, REST/WADL) ☑ Familiarity with JConsole and JasperReports (recommended)
Course Topics	▸ Governance Registry Overview ▸ Product Demonstration ▸ Registry DB schema and Data Access Layer ▸ Mounting and Federated Deployments of the Registry ▸ Repository Kernel ▸ Service Governance ▸ Developing Custom Asset Models ▸ Monitoring, Reporting and Statistics ▸ APIs and Extension Points ▸ WSO2 Developer Studio Registry Plugins ▸ Populating Data Samples into the Repository

Message Broker

WSO2 Message Broker (MB) enables applications to exchange communications asynchronously or publish messages for timely access by many subscribers. For example, news bureaus can publish different categories of news – business, sports, science and technology, weather – and consumers can subscribe to the latest news that interests them.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic Java programming experience ☑ Basic understanding of XML ☑ Basic understanding of web services & related standard (SOAP, WSDL)
Course Topics	▸ Message Broker Overview ▸ Product Demonstration ▸ Introduction to P2P (Queue) Messaging ▸ Introduction to Pub/Sub (Topic) Messaging ▸ MB Features and Configuration ▸ P2P and Pub/Sub with JMS API ▸ P2P and Pub/Sub with AMQP Clients (.net) ▸ Integrating MB with ESB (MS/MP and JMS Proxy) ▸ Integrating MB with DSS ▸ Clustering MB

Storage Server

WSO2 Storage Server (SS) conveniently delivers multi-tenant structured and unstructured data storage to development projects. Development teams can rapidly provision and access secure and scalable relational, NoSQL Columnar, and Hadoop Distributed File System (HDFS) repositories using a consistent management process. The Storage Server management console allows teams to create Databases, add users, and provision access based on the web application's database policies.

Our Cloud-aware Storage Server supports elastic scalability, on-demand self-service provisioning, and consumption based pricing models. The server publishes usage data to WSO2 Business Activity Monitor and enables advanced analytics, monitoring, and billing.

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Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic understanding of storage technologies
Course Topics	▸ Storage Server Overview ▸ Product Demonstration ▸ Relational Database Provisioning ▸ NoSQL(Cassandra) Provisioning ▸ File System (HDFS) Provisioning ▸ Cassandra Cluster Management and Monitoring ▸ Setting up Cassandra Clusters ▸ Setting up HDFS Clusters

Stratos

WSO2 Stratos is a cloud middleware platform built based on WSO2 Carbon. WSO2 StratosLive is the publicly hosted Java Platform as a Service(PaaS) of WSO2 Stratos, deployed over Amazon Infrastructure as a Service, allowing users to register an account of free or paid account types, based on their requirements. WSO2 Stratos is a polyglot PaaS and enables the WSO2 Carbon middleware platform and other languages or runtime environments to run on the cloud.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	4days
Intended Audience	DevOps, Developer, Integration Engineer
Pre-requisites	**Required courses (previously attended):** WSO2 Carbon (recommended) **Required technical skills:** ☑ Basic understanding of IaaS, JSON, and Cloud Concepts
Course Topics	▸ Apache Stratos Overall Architecture ▸ Stratos communication bus ▸ Tenants and Partitions ▸ Auto scaling and Deployment policies ▸ Deployment policies ▸ Stratos REST API ▸ Stratos CLI and web UI ▸ Stratos Load Balancer and Extension Points ▸ Stratos Auto Scaling ▸ Artifact distribution ▸ Cloud bursting ▸ Cloud SLA ▸ Metering and monitoring ▸ Configuring Stratos Development Environments ▸ Stratos Agent ▸ Deployment orchestration using puppet ▸ Cartridges

User Engagement Server

The WSO2 User Engagement Server (UES) unlocks enterprise data for business intelligence, monitoring and other enterprise requirements. Empowering not only developers but business users as well, UES helps to rapidly create visually appealing and engaging web components such as dashboards, microsites and gadgets. As UES provides server-side capabilities out-of-the-box, going from data to screen has never been easier.

WSO2 UES includes an inbuilt Jaggery.js editor, site browser and graphical composer for dashboards. Tightly integrated to an enterprise store of Open Social Gadgets and microsites, users can build dashboards, microsites and gadgets with 3rd party data sources, and even share them among authenticated or anonymous users across the enterprise.

With UES, you can leverage the award-winning WSO2 Carbon midldleware platform's QoS features and Jaggery.js flexibility of writing server-side code without compiling or building.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

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Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer, Integration Engineer, Architect (optional)
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic understanding of JavaScript/HTML/CSS ☑ Basic understanding of Open Social Gadgets ☑ Basic understanding of Jaggery
Course Topics	▸ User Engagement Server Overview ▸ Product Demonstration ▸ Creating Custom Dashboards ▸ Creating Pub-Sub Gadgets ▸ Writing a Basic Gadget ▸ Adding new Gadget Templates to the UES store ▸ Using flot JavaScript Library for Charting ▸ Writing JaggeryApps using Caramel

Custom Deep Dives

Custom Deep Dives can span a range of topics and options, depending on your needs. For example,

- Combining standard training classes with custom topics
- A mix of standard classes and knowledge transfer on your exiting configuration
- Advanced topics on top of our existing curriculum

Please contact WSO2 (wso2.com/contact) if you are interested in scheduling a custom training deep dive. We can help you assess your training gaps and design a custom deep dive that fits your needs.

Delivery Method	Online, Classroom @ WSO2 offices, or Onsite at Customer Location
Duration	Depends on training content
Intended Audience	Depends on training content
Pre-requisites	Depends on training content
Course Topics	Determined by Customer and WSO2 Training Services

Development Tools

App Factory

WSO2 App Factory is a multi-tenant, elastic and self-service Enterprise DevOps platform that enables multiple project teams to collaboratively create, run and manage enterprise applications. Combining complete application lifecycle management and Platform-as-a-Service (PaaS) capabilities, WSO2 App Factory makes it possible to develop, test, deploy to production and retire applications with a single click. It also provides an easy way to discover and consume apps and APIs through a user-friendly storefront.

App Factory supports development of any type of enterprise application, including web apps, work flows, integration, business rules, mashups, mobile apps and more, leveraging WSO2 middleware as a service or even non-Java and non-WSO2 technologies. By integrating with your existing tools, including source control, issue tracker, forums, build management, and deployment, it provides a complete systems development life cycle (SDLC) tool chain.

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

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Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic Java programming experience
Course Topics	▸ App Factory Overview ▸ Product Demonstration ▸ Writing a Java Application ▸ Writing an Application with a Database ▸ Writing Apps on Top of an API ▸ Using Registry APIs ▸ User Store APIs

Developer Studio

A major step forward in providing a complete Eclipse-based SOA development environment for the award-winning WSO2 Carbon platform, developers can now define a project representing a complete Composite Application (C-App) spanning multiple products and features.

Developer Studio, immensely simplifies creation of artifacts with graphical editors and management of the links and dependencies between these services. Developers can develop, debug and deploy composite applications and Web services on-premises and in the cloud from one environment.

It further helps test and debug them within the IDE, and helps deploy them as Composite Application aRchives (CAR) on to your WSO2 Carbon-based servers or onto a WSO2 Private PaaS. Development, testing and deployment of composite middleware applications have never been easier or faster!

This course covers theory and "how-to" basics for the configuration and management of your solution through a step-by-step demonstration of the administrative tools that control the configuration and customization.

Hands-on exercises highlighting various business scenarios help cement the newly acquired knowledge and provide an opportunity to discuss and explore scenarios common to attendees.

Delivery Method	Classroom
Duration	1 day
Intended Audience	Developer
Pre-requisites	**Required courses (previously attended):** None **Required technical skills:** ☑ Basic programming experience ☑ Basic understanding of WSO2 Middleware Platform ☑ Basic understanding of Cloud Services APIs ☑ Experience with Eclipse IDE (Recommended)
Course Topics	▸ Developer Studio Overview ▸ Product Demonstration ▸ Developing Enterprise Applications ▸ Development Best Practices ▸ WSO2 ESB Graphical Editor ▸ Connecting C2C and C2E with ESB Connectors ▸ Development Governance and External References