

Time	Questions to be discussed
Day 1	
11:00 – 11:15	Intro
11:15 – 11:50	Bpm'online 7.x architecture
	<ul style="list-style-type: none"> ▪ System infrastructure. Required components (DBMS, application server, Redis session server, SVN) ▪ Application server structure, WebAppLoader and WebApp ▪ Fail safe options ▪ Benefits of cloud deployment
11:50 – 12:10	On-site system setup
	<ul style="list-style-type: none"> ▪ System requirements ▪ Setup procedure ▪ Folder structure ▪ Web-config setup. Common issues during setup
12:10 – 12:45	Logic levels of user interaction
	<ul style="list-style-type: none"> ▪ Database ▪ Server core ▪ Client core ▪ Configuration
12:45 – 13:00	User licensing
13:00 – 14:00	Bpm'online 7.x administration model
	<ul style="list-style-type: none"> ▪ Summary ▪ User role types: organizational and functional ▪ Administration by objects, operations, records and columns ▪ Administration by actions ▪ Audit log ▪ User creation
System core. Key elements and definitions	
14:00 – 14:30	bpm'online packages. Workspaces
	<ul style="list-style-type: none"> ▪ Concept and purpose of packages ▪ Package properties and structure ▪ Key package components: schemas, builds, data, SQL-scripts. ▪ Adding package components. Connecting external builds. ▪ Package inheritance and replacement mechanism ▪ WorkspaceConsole utility
14:30 – 15:00	SVN management
	<ul style="list-style-type: none"> ▪ Working with multiple repositories
15:00 – 15:30	Q&A. Practical task: create users, roles and set up access rights

Time	Questions to be discussed
Day 2	
11:00 – 11:10	Intro
11:10 – 12:00	Schemas, objects, code generation and configuration concept. <ul style="list-style-type: none"> ▪ General structure ▪ Schemas and their types ▪ Schema designers. Editable item concept (DesignItem) ▪ Schema managers ▪ Metadata ▪ Resources ▪ Code generation and compilation
12:00 – 12:10	Data and cache storage
12:10 – 12:30	Bpm'online data model. Configuration server objects <ul style="list-style-type: none"> ▪ Objects and their structure ▪ Objects and database tables ▪ Object components ▪ Object designer Practical case: create object using the object designer
12:30 – 13:00	Object replacement mechanism <ul style="list-style-type: none"> ▪ Principles of replacing objects Practical case: Creating a replacing object
13:00 – 14:40	Working with data: EntitySchemaQuery
	<ul style="list-style-type: none"> ▪ EntitySchemaQuery: Basic principles ▪ Root schema. Direct and inverse connections ▪ ESQ properties ▪ Access rights while working with ESQ ▪ Cache and ESQ ▪ Examples of working with ESQ: adding columns, joining schemas, adding conditions and filtering ▪ Data access alternatives (Select, Insert, Delete, Update classes)
14:40 – 15:00	Q&A

Time	Questions to be discussed
Day 3	
11:00 – 11:10	Intro
11:10 – 11:50	Business processes. Process designer <ul style="list-style-type: none"> ▪ Process concept and its schema ▪ Base process items ▪ Building a process using designer Practical case: building a business process
11:50 – 12:10	Technology overview of the client system
	<ul style="list-style-type: none"> ▪ AMD concept. Module concept ▪ Module definition ▪ Client module types ▪ Bpm'online client module peculiarities Practical case: example of client module creation
12:10 – 12:30	MVVM template. Implementation within bpm'online
	<ul style="list-style-type: none"> ▪ MVVM work principles ▪ Connection mechanism ▪ Module notifications. Working with the sandbox. Notification subscribing and posting ▪ Data transfer between modules
12:30 – 13:00	Practical case: working with the section wizard
13:00 – 13:30	Client schema. Client schema designer
	<ul style="list-style-type: none"> ▪ Client schema concept ▪ Client schema structure ▪ Client schema types ▪ Client schema designer Practical case: creating client schemas using the schema designer
13:30 – 15:00	Standard configuration tasks
	<ul style="list-style-type: none"> ▪ Creating a standard section ▪ Creating a standard detail ▪ Adding actions to the section/edit page ▪ Page interface management ▪ Additional page logic implementation Practical case: solving standard configuration tasks

Time	Questions to be discussed
Day 4	
11:00 – 11:10	Intro
11:10 – 12:00	Standard configuration tasks <ul style="list-style-type: none"> ▪ Field value validation ▪ Business rule application for interface item setup Practical case: solving standard configuration tasks
12:00 – 12:30	Configuration web-service <ul style="list-style-type: none"> ▪ Creating web-service within configuration ▪ Calling configuration web-service from server and client code Practical case: creating and calling user configuration web-service
12:30 – 13:00	Application debugging <ul style="list-style-type: none"> ▪ Server code debugging ▪ Client code debugging ▪ Database query profiling ▪ Additional instruments for debugging ▪ ORM profiler ▪ Log4net logger ▪ Browser console Practical case: server code debugging
13:00 – 13:20	Bpm'online integration using the OData protocol <ul style="list-style-type: none"> ▪ What is OData? ▪ EntityDataService data service ▪ Operations to work with collections of objects ▪ Operations to modify collections of objects Practical case: examples of creating, modifying and deleting records using OData queries
13:20 – 13:40	Starting business processes from external applications <ul style="list-style-type: none"> ▪ ProcessEngineService.svc service to start business processes from external applications Practical case: starting a business process from an external application
13:40 – 14:00	Data import from Excel
14:00 – 14:50	Q&A
14:50 – 15:00	Progress review. Course completion.