

Developer Advanced Certification

Guide

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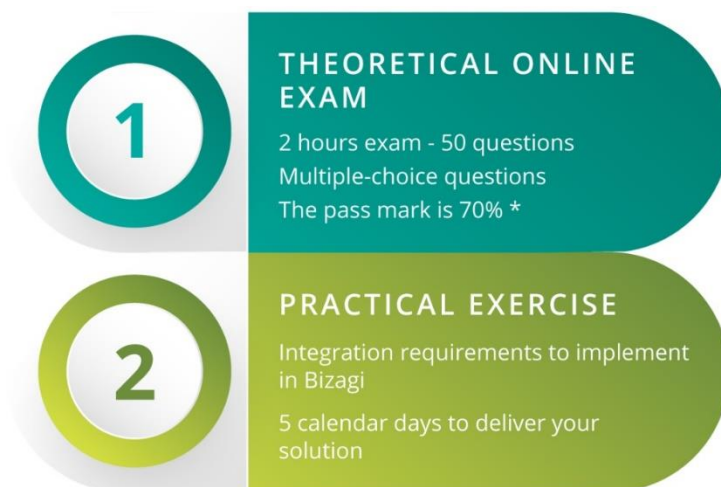
Introduction

This guide will help you to understand the scope of the Developer Advanced certification, which areas and topics are assessed, and the resources we offer to enlarge your knowledge and obtain the certification.

The Bizagi Developer Advanced Certification

The Bizagi Developer Advanced certification will increase your market value and enable you to excel as a Bizagi expert, able to turn any process model into a running application. Moreover, you can gain visibility and credibility with clients and employers and help them to execute digital transformation strategies.

The exam consists of two individual exams:



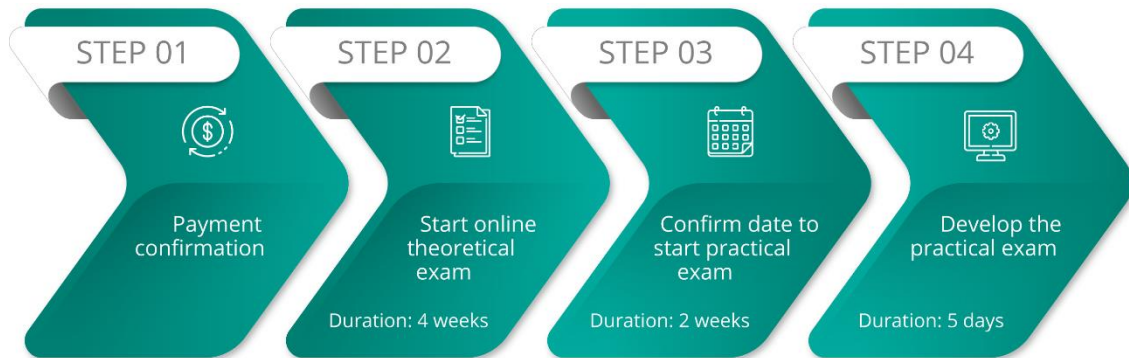
*Only if you pass the online exam will you be assigned a practical exercise.

Note: If you fail the certification, you can re-try it after 3 months. Thereafter, you can buy the rights to start the process again.

The certification process comprises the following steps:

1. Start the certification process by making payment.
2. After the payment confirmation is received, you will have 4 weeks to take the theoretical exam. You can start at any time during this period.
3. Once you have taken and passed the theoretical exam, you have 2 weeks to decide on and schedule a date to start the practical exercise. The starting date should be within these 2 weeks.

4. Finally, starting from the date you choose, you will have 5 calendar days to deliver your solution.



Programming Skills

The Developer Advanced Certification is aimed for users with technical background and programming skills. You must understand the following programming languages:

- C#
- Javascript
- HTML
- CSS
- Json
- XML

Although you don't need to have any certification regarding these languages, you have to fully comprehend them. Also make sure that you are familiar with Microsoft Visual Studio:

- How to open projects
- How to run and debug code
- How to publish web services

Preparing the Exam

Prerequisites

Before enrolling for the Bizagi Developer Advanced certification, make sure that you have completed the following courses:

- [Process Automation 2](#)
- [Best Practices for Automation](#)
- [Best Practices for Integration](#)

Additionally, we recommend reviewing with further detail the following topics:

- [Environment administration](#)
 - [Management Console](#)
 - [Bizagi parameters configuration](#)
- [Work Portal Administration](#)
 - [Users Administration](#)
- [Deployment](#)
 - [Considerations and requirements](#)

It is mandatory to be certified as [Developer Associate](#). Experience implementing Bizagi Projects is highly recommended.

Preparation questions

The following panels, which are most likely to be part of either the theoretical exam or the practical exercise, will help you to assess your knowledge to review basic and advanced topics about integration systems in process automation.

Each panel contains a set of questions that will guide you through the topics that you need to review. The questions DO NOT ENCOMPASS all the topics assessed in the certification, but they will give you an idea of the minimum knowledge required to successfully complete the theory exam and practical exercise.

For each question, you have two links, one from self-paced courses on the [e-learning](#) site and another to our product documentation on the Help page.

1 INVOKING EXTERNAL SERVICES

Basic Knowledge

¿What are asynchronous activities?	Go to video	Go to user guide
¿How can you invoke SOAP web services?	Go to video	Go to user guide
¿How can you invoke REST web services?	Go to video	Go to user guide

Advanced Topics

¿When do you need the advanced interface configuration?	Go to video	Go to user guide
¿How can you troubleshoot web services invocation?	Go to video	Go to user guide

2 DATA LEVEL INTEGRATION

Basic Knowledge

¿When do you need to integrate at the data level and what are the different types of data integration?	Go to video	Go to user guide
¿How can you replicate entities?	Go to video	Go to user guide
¿How can you virtualize entities?	Go to video	Go to user guide

Advanced Topics

¿When do you need to use the advanced replication configuration?	Go to video	Go to user guide
¿When do you need to use the advanced virtualization configuration?		Go to user guide

3 BIZAGI INTEGRATION LAYER

Basic Knowledge

¿When do you need to use the Bizagi SOA layer?	Go to video	Go to user guide
¿What is the Entity Manager and Workflow?	Go to video	Go to user guide
¿What is the Bizagi OData layer?	Go to video	Go to user guide

Advanced Topics

¿How can you get information from your entities?	Go to video	Go to user guide
¿How can you create cases form external systems?	Go to video	Go to user guide
¿How do you use de OData API?	Go to video	Go to user guide

4 BIZAGI CONNECTORS

Basic Knowledge

¿What is a Bizagi connector?	Go to video	Go to user guide
¿How can you create Bizagi connectors?		Go to user guide
¿How can you create a REST connector?	Go to video	Go to user guide

Advanced Topics

¿How can you create a custom connector?	Go to video	Go to user guide
¿What is the Bizagi API for connectors?		Go to user guide

5 BIZAGI WIDGETS

Basic Knowledge

¿What is a Bizagi widget?	Go to video	Go to user guide
¿How is the structure of a Bizagi widget?	Go to video	Go to user guide
¿How can you create a new widget?	Go to video	Go to user guide

Advanced Topics

¿What is the Bizagi API for widgets?		Go to user guide
¿How can you modify an existing widget?		Go to user guide

¿How to troubleshoot a widget?		<u>Go to user guide</u>
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6 OTHER

Basic Knowledge

¿How is the architecture of a project in Bizagi?		<u>Go to user guide</u>
¿How can you integrate your ECM with Bizagi?	<u>Go to video</u>	<u>Go to user guide</u>
¿What are the different types of authentication?	<u>Go to video</u>	<u>Go to user guide</u>

Advanced Topics

¿How can you execute tasks using emails?		<u>Go to user guide</u>
¿How can you deploy processes in Bizagi?		<u>Go to user guide</u>

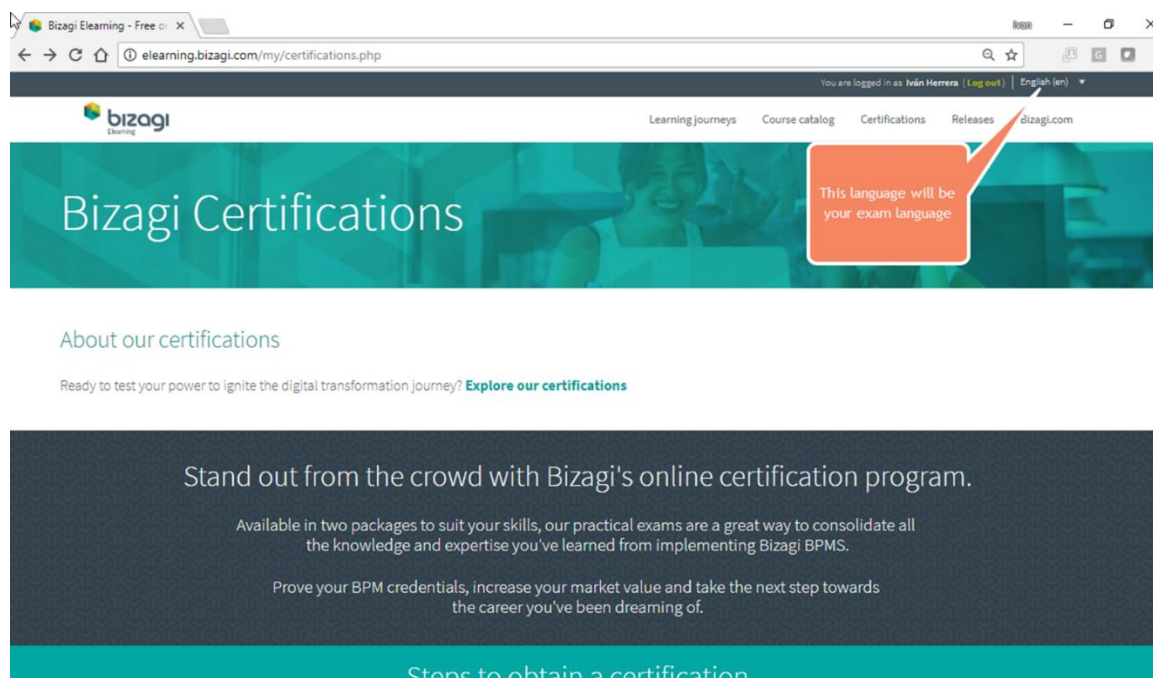
Taking the Theoretical Online Exam

Requirements

The theoretical exam is web-based. The minimum system requirements are:

- Chrome browser at least version 32
- Port 80 opened
- Fast and stable internet connection. We recommend turning off any bandwidth consumption service (file sync, video streaming, or sharing apps), and having at least 4MB bandwidth.

Verify the language of your exam on the elearning.bizagi.com site before starting the exam:



Test Structure

The theoretical exam has three types of questions. Following is a description of each type:

1. True or False question

A statement is given, and you must decide whether it is true or false. Only one option is valid.

For example:



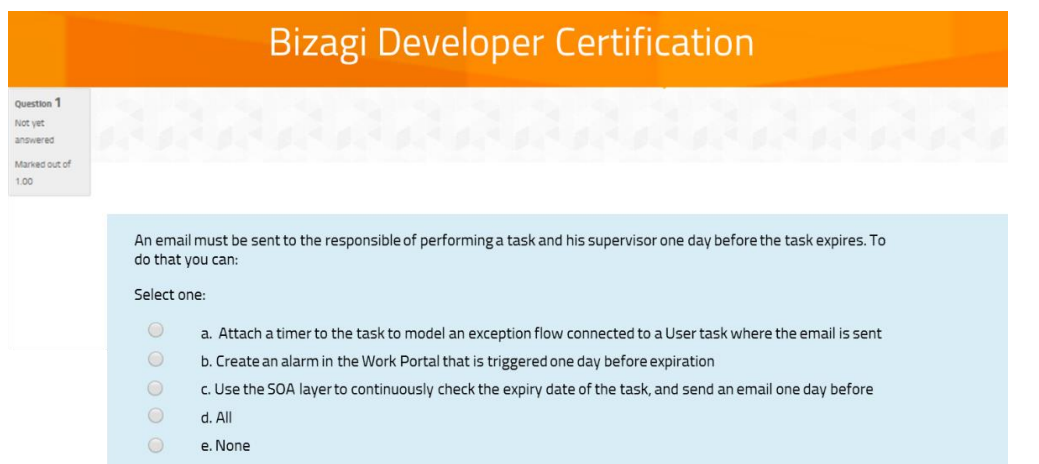
The screenshot shows a quiz interface for 'Bizagi Developer Certification'. On the left, a sidebar indicates 'Question 1', 'Not yet answered', and 'Marked out of 1.00'. The main question area has a light blue background and contains the text: 'You can change the password of an interface in the Management Console'. Below this, it says 'Select one:' followed by two radio button options: 'True' and 'False'.

2. Multiple choice – single statement question

A question is asked, or a business scenario is mentioned. Possible Statements are displayed with letters (a,b,c,d,e), giving possible answers to the question or solutions to the business scenario.

The **None** option implies that none of the statements given is true or valid. On the other hand, the **All** option must be selected if all the statements are true. Only one option is valid.

For example:



The screenshot shows a quiz interface for 'Bizagi Developer Certification'. On the left, a sidebar indicates 'Question 1', 'Not yet answered', and 'Marked out of 1.00'. The main question area has a light blue background and contains the text: 'An email must be sent to the responsible of performing a task and his supervisor one day before the task expires. To do that you can:'. Below this, it says 'Select one:' followed by five radio button options: 'a. Attach a timer to the task to model an exception flow connected to a User task where the email is sent', 'b. Create an alarm in the Work Portal that is triggered one day before expiration', 'c. Use the SOA layer to continuously check the expiry date of the task, and send an email one day before', 'd. All', and 'e. None'.

3. Multiple choice – multiple statements

A question is asked, or a business scenario is mentioned. Multiple statements are displayed in Roman numerals (i, ii, iii, iv, v) giving possible answers to the question or solutions to the business scenario.

Subsequently, possible options are displayed with letters (a,b,c,d,e). Each option contains a Roman numeral (a statement) or a combination of them, showing which statements are true.

The **None** option implies that none of the statements is true. On the other hand, the **All** option must be selected if all the statements are true. Only one option is valid.

For example:



The screenshot shows a question interface for Bizagi Developer Certification. The title bar is orange with the text "Bizagi Developer Certification". Below the title bar, there is a question card with a light blue background. The question text is "The Management Console can be used to:". Below the question text, there are four options listed in Roman numerals: i. Manage the expressions and business rules of a project, ii. Define the environment parameters such as the SMTP, Email integration and custom parameters, iii. Manage jobs executed by the Scheduler, and iv. Manage the information of final users. Below the question text, there is a "Select one:" label, followed by five radio button options: a. i and ii, b. ii and iii, c. None, d. All, and e. i, ii and iv. On the left side of the question card, there is a small grey box with the text "Question 1", "Not yet answered", and "Marked out of 1.00".

At the end of this document there is a **Practice Test**.

Taking the Practical Exercise

Requirements

In the practical exercise, you need to integrate different systems running within a virtual machine. Therefore, you need to have access to a Remote Desktop Connection considering the following:

- You need a fast and stable internet connection. We recommend turning off any bandwidth consumption service (file sync, video streaming, or sharing apps), and having at least 4MB bandwidth
- You need an open connection using the following ports: 1010, 2020 or 3030
- A Microsoft personal account to activate Microsoft® Visual Studio for free

Export and Deliverables

At the end of the practical exercise, you need to send us an exported file of your project (a file with .btex extension). We recommend reviewing the official documentation:

Sharing processes between projects

Conclusion

The Bizagi Developer Advanced Certification is an achievement that gives you a competitive advantage in the field of digital transformation and BPM strategies. We hope you find all the resources we provide useful to achieve your goal. If you have any questions you can consult the [FAQ](#) page or email us at elearning@bizagi.com.

Resources

- [E-learning](#)
- [Help](#)
- [Bizagi Community](#)

Practice test

Question 1

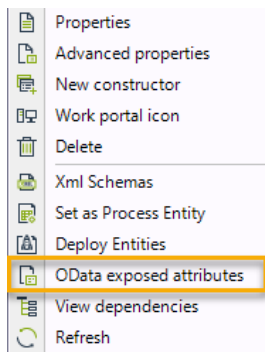
Widgets are created using a web-based SDK in JavaScript, and can be used in forms to enhance the user interface:

Select one:

- a. True
- b. False

Question 2

With reference to the OData exposed attributes option:



You can define OAuth credentials (ClientId and Client Secret) for each entity to deny access to certain attributes:

Select one:

- a. True
- b. False

Question 3

Related to Data Level of integration:

- i. You can integrate non-relational databases
- ii. There are two types: Virtualization for Parameter and System entities, and Replication for Stakeholder entities
- iii. There are two types: Virtualization for Master entities and Replication for Parameter entities

- iv. You can use any database like MySQL, MongoDB, among others with the native integration

Select one:

- a. i and ii
- b. ii and iv
- c. iii
- d. None
- e. All

Question 4

You can define message encryption to the Bizagi SOA layer using x.509 certificates. This can be configured in the Management Console

Select one:

- a. True
- b. False

Question 5

Consider the following scenario: A company uses an LDAP as an identity provider where the information of users is stored. Additionally, the company authorizes the use of its applications using a Microsoft domain. The company has decided to use Bizagi as the digital transformation platform and wants to integrate its infrastructure with Bizagi. To do this, you can:

Select one:

- a. Create a web service that exposes the information of users from LDAP and invoke it in a process. Then, configure the LDAP synchronization to integrate the Windows authentication system
- b. Use the Mixed authentication and select LDAP and Windows
- c. You cannot integrate that architecture for the authorization of users in Bizagi
- d. Use the native LDAP synchronization option to store the users in the WFUSER, then configure the Windows authentication in Bizagi using the Management Console

Answers

1. a
2. b
3. c
4. a
5. d