

# **Developer Associate Certification Guide**

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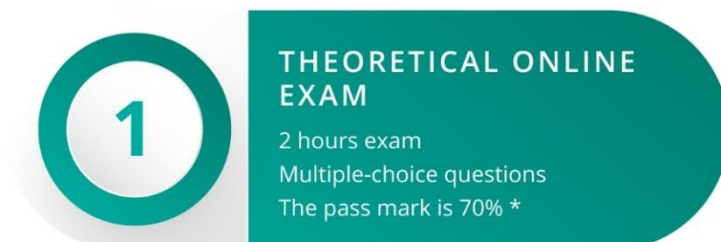
# Introduction

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

## The Bizagi Developer Associate Certification

The Bizagi Developer Associate 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 one individual exam:



**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.



## Programming Skills

The Developer Associate 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 Associate certification, make sure that you have completed the following courses:

- [Process Modeling](#)
- [Process Automation 1](#)
- [Integration and Development](#)

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](#)

## 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?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿How can you invoke SOAP web services?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿How can you invoke REST web services?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>

## Advanced Topics

¿When do you need the advanced interface configuration?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿How can you troubleshoot web services invocation?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>

# 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?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿How can you replicate entities?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿How can you virtualize entities?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>

## Advanced Topics

¿When do you need to use the advanced replication configuration?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿When do you need to use the advanced virtualization configuration?		<a href="#">Go to user guide</a>

# 3 BIZAGI INTEGRATION LAYER

## Basic Knowledge

¿When do you need to use the Bizagi SOA layer?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿What is the Entity Manager and Workflow?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿What is the Bizagi OData layer?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>

## Advanced Topics

¿How can you get information from your entities?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿How can you create cases form external systems?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿How do you use de OData API?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>

## 4 BIZAGI CONNECTORS

### Basic Knowledge

¿What is a Bizagi connector?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿How can you create Bizagi connectors?		<a href="#">Go to user guide</a>
¿How can you create a REST connector?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>

### Advanced Topics

¿How can you create a custom connector?	<a href="#">Go to video</a>	<a href="#">Go to user guide</a>
¿What is the Bizagi API for connectors?		<a href="#">Go to user guide</a>

## 6 OTHER

### Basic Knowledge

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

### Advanced Topics

¿How can you execute tasks using emails?		<a href="#">Go to user guide</a>
¿How can you deploy processes in Bizagi?		<a href="#">Go to user guide</a>



# 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:

The screenshot shows a web browser window with the URL `elearning.bizagi.com/my/certifications.php`. The page is titled "Bizagi Elearning" and "Bizagi Certifications". A callout box highlights the language selection dropdown menu, which is currently set to "English (en)". Below the header, there is a section titled "About our certifications" with a link to "Explore our certifications". A dark blue banner contains the text: "Stand out from the crowd with Bizagi's online certification program. Available in two packages to suit your skills, our practical exams are a great way to consolidate all the knowledge and expertise you've learned from implementing Bizagi BPMS. Prove your BPM credentials, increase your market value and take the next step towards the career you've been dreaming of." The bottom of the banner has a teal bar with the text "Steps to obtain a certification".

## 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:



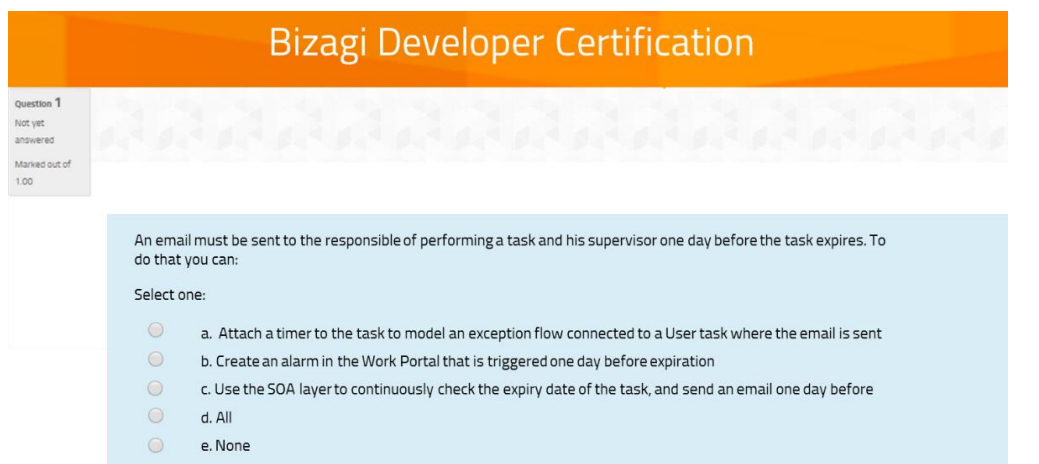
The screenshot shows a quiz interface for 'Bizagi Developer Certification'. On the left, a sidebar indicates 'Question 1', 'Not yet answered', and 'Marked out of 1.00'. The main question area has a light blue background and contains the text: 'You can change the password of an interface in the Management 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**.

# Conclusion

The Bizagi Developer Associate 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](mailto:elearning@bizagi.com).

# Resources

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

# Practice test

## Question 1

Which statement(s) holds true for a connector?

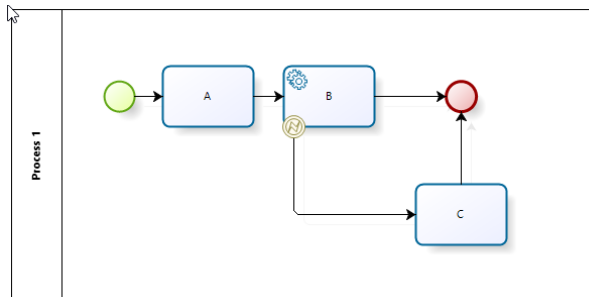
- i. Is used to invoke SOAP web services
- ii. You can include external libraries downloaded from the NPM (node package manager)
- iii. If the minor version changes, the connector is overwritten in Bizagi Studio
- iv. There are two types that can be created from scratch: REST and Custom connectors

Select one:

- a. i and iv
- b. ii and iii
- c. ii, iii and iv
- d. i
- e. None of the options

## Question 2

Based on the following BPMN diagram:



- i. The exception path of task B is triggered when a method of the Bizagi SOA layer is invoked from an external application
- ii. Task C is executed when a controlled error happens (Business error)
- iii. The task C has to be configured as an asynchronous activity because you don't know when it can be instantiated
- iv. The path connected to the Error Event is configured in the Interface configuration (Step number 6 of the Wizard)

Select one:

- a. i and iv
- b. iii
- c. ii and iv
- d. i and ii
- e. None of the options

### Question 3

Which statement(s) correctly defines a configuration needed to invoke the OData layer?

The screenshot shows the 'Register Application' form in the 'OAuth 2 Applications' management console. The form has the following fields and options:

- Name:** A text input field.
- Grant Type:** A dropdown menu currently set to 'Client credentials'.
- Web Site:** A text input field.
- Allowed Scope:** Two checkboxes, 'API' and 'LOGIN', both of which are currently unchecked.
- User Name:** A text input field with a search icon.
- User Domain:** A text input field.
- Token lifetime (mins):** A text input field.
- Description:** A text input field.

At the bottom of the form, there are two buttons: 'Save' and 'Cancel'.

Select one:

- a. You should only select the LOGIN option in Allowed Scope, and register any user to obtain the data exposed through the OData layer
- b. You should not select the Client credentials Grant Type to invoke the OData layer
- c. You should select the API option in Allowed Scope, and define the user who has authorization to obtain the data exposed through the OData layer
- d. None of the options

#### Question 4

When you need to use a Connector in a process, you have to:

Select one:

- a. Use a Message task and configure it in the Step number 6 of the wizard
- b. Use a Service task as an asynchronous activity, define an On Exit activity action, select the Connector option, and then select the connector
- c. Use a Script task and define an activity action using the interface option, then select the connector
- d. Go to the Expert view, select the Process module, and inside the process' options, use the External system configuration

#### Question 5

When a Service task is configured as an asynchronous activity, which of the following statement(s) is true?

- i. The first invocation of an interface is done by the Web Application if the activity is configured with the Show Feedback option
- ii. If the invocation fails, the Scheduler handles the retries
- iii. It is recommended also for the usage of connectors
- iv. On Exit expressions are executed in every retry

Select one:

- a. i
- b. i and iii
- c. ii, iii and iv
- d. ii and iv
- e. All



## Answers

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