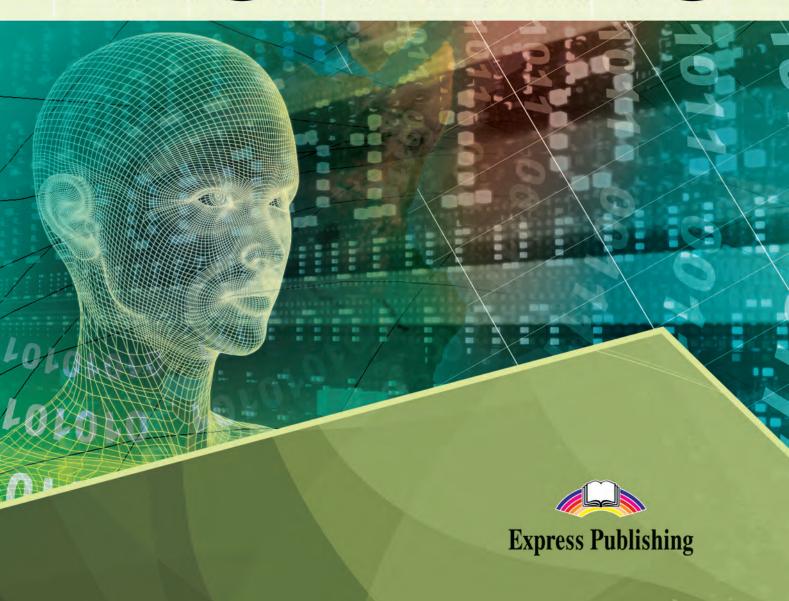


Virginia Evans Jenny Dooley Enrico Pontelli

# SOFTWARE ENGINERING



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# 4. Cloud Computing: SaaS and PaaS

### Get ready!

- Before you read the passage, talk about these questions.
  - 1 What are some ways that software is distributed?
  - 2 How do users pay for cloud computing services?



lized So

Cloud computing is changing the distribution of computing and storage services. Cloud computing is a network of companies and users sharing resources. Software engineers must be ready to meet demands for this specialized software.

One model of cloud computing is SaaS, or Software as a Service. In this model, software is hosted by a provider and accessed over a network. Another example is PaaS, or Platform as a Service. In this model, computer hardware and software are rented. Software on demand falls under the PaaS category.

To provide their services, companies purchase **software** licenses. Then they charge users for access to the software. Some companies charge users by metered **fees**. This means that users pay afterwards for whatever they used. Others support pay-as-you-go systems. In these cases, software as a product is purchased in advance, when it is needed.

Several requirements of the computer platform are necessary to access cloud technology. The computer must be online. The bandwidth of the system needs to be large in order to quickly send and receive information. But if the specifications are right, cloud computing is a tremendously useful tool. Users can easily access data from web browsers, among other methods. A tip to software engineers: get into this expanding industry!

### Reading

- 2 Read the journal article. Then, choose the correct answers.
  - 1 What is the main idea of the article?
    - A the challenges of developing cloud computing software
    - **B** recent changes in cloud computing technology
    - C the history of the development of cloud computing
    - **D** an overview of cloud computing models
  - 2 What is true of SaaS users?
    - A They access software that is provided by a network host.
    - **B** They rent software from a cloud computing provider.
    - **C** They purchase software from the developer.
    - **D** They need a specialized web browser.
  - Which of the following is NOT required for users to access a cloud?
    - A web browser
- C a fee
- B software license
- **D** a large bandwidth

## Vocabulary

- 3 Match the words (1-8) with the definitions (A-H).
  - 1 \_\_ cloud computing
- 6 online
- 2 \_\_ distribution
- **7** \_\_ bandwidth
- **3** \_\_ software license
- 8 \_\_ software on
- 4 \_\_ computer platform
- demand
- \_\_ browser
- A a software system that is used to gain access to information on the internet
- **B** being connected to the internet
- **C** a measure of a computer system's capacity to send and receive information
- **D** a combination of hardware and system software that allows an application to run
- E a model in which software is rented from a
- **F** a legal agreement which grants the buyer of a program the right to use it
- G the action of supplying a product or service
- H a model in which computing is delivered as a service rather than as a product



- 4 Choose the sentence that uses the underlined part correctly.
  - 1 A In PaaS, computer software can be rented.
    - **B** A computer must be equipped with <u>SaaS</u> to access a web browser.
  - **2** A The company uses a <u>pay-as-you-go</u> system, requiring a set monthly fee.
    - **B** The customer pays a <u>metered fee</u>, so he only pays for the services he uses.
  - **3 A** To access data storage, a computer must have <u>software on</u> <u>demand</u>.
    - **B** Some software developers only supply software as a product.
- **5** Solution **6** Listen and read the journal article again. What must a computer have in order to access the cloud?

### Listening

- 6 Listen to a conversation between a manager and an engineer. Mark the following statements as true (T) or false (F).
  - 1 \_\_ The man had a negative experience with cloud computing
  - 2 \_\_ The company recently requested a new software license.
  - 3 \_\_ The woman recommends SaaS.
- Listen again and complete the conversation.

Manager: Hey, Tonya. I'm thinking about upgrading the

	company's network, and I was wondering what  1	
Engineer:	SaaS is a networking model.	
Manager:	I don't know much about computers. What does that mean?	
Engineer:	Let me explain the basics. SaaS stands for Software as a Service. It is a model that <b>2</b>	
Manager:	What's cloud computing?	
Engineer:	It's a 3services.	
Manager:	So it's a way to access information?	
Engineer:	Yes, partly. Clients purchase the right to a <b>4</b> Then they share that software with their users.	
Manager:	Okay. How <b>5</b> for that, though?	
Engineer:	er: Clients typically pay regular fees. Some companies charge users metered fees, while others 6	
	It just depends on your	
	needs.	

### **Speaking**

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

### **USE LANGUAGE SUCH AS:**

I'm thinking of ...
What are your thoughts on ...
Some prefer ...

**Student A:** You are a manager. Talk to Student B about:

- elements of cloud computing
- how the services work
- his or her recommendation

**Student B:** You are an engineer. Talk to Student A about elements of cloud computing.

### Writing

9 Use the journal article and conversation from Task 8 to write a review of SaaS and PaaS. Include: user options for accessing information, how users can pay for services, and what computer requirements users need to access the cloud.

