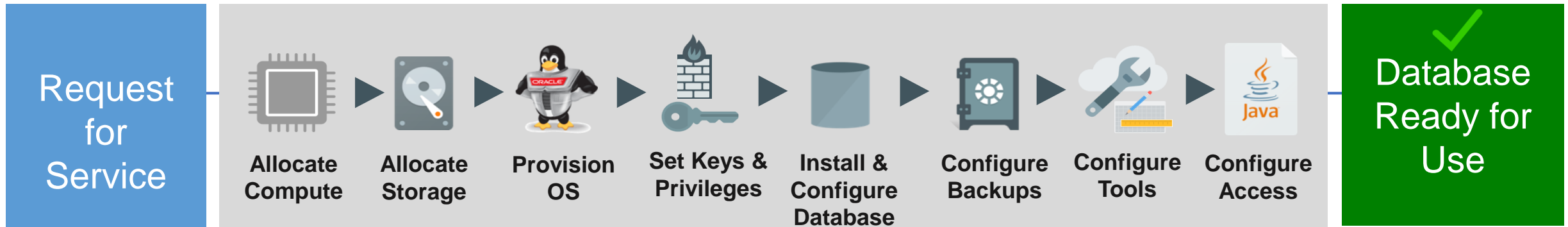# Creating DBCS Database Deployments

Objectives

- After completing this lesson, you should be able to:
    - Create a DBCS database deployment
    - Describe how an SSH key pair is used in authentication
    - Explain how storage volumes are allocated for a DBCS database deployment
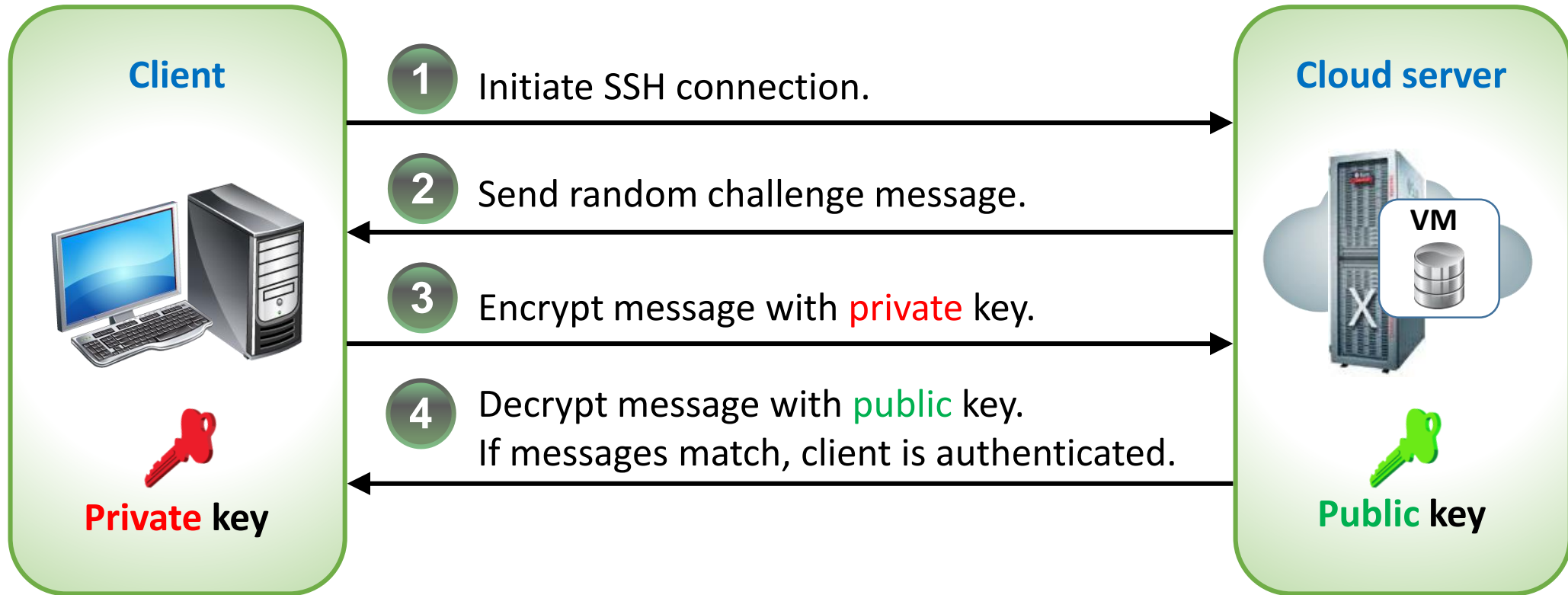
Automated Database Provisioning

Automated provisioning based on input to the Create Oracle Database Cloud Service Instance wizard or through REST APIs

Creating a Database Deployment

- The wizard takes you through the database deployment creation, prompting for the following information:
  - Subscription: Service level, billing frequency, software release, and software edition
  - Service: Service name, compute shape, time zone, and SSH key
  - Database Configuration: Storage, database name (SID), PDB name, character set, and password for administrative accounts
  - Backup and Recovery Configuration: Backup destination and cloud storage information, if applicable
  - Additional Options: Real Application Clusters (RAC), Data Guard, and GoldenGate

How SSH Key Pairs Are Used

Client

Cloud server

VM

1 Initiate SSH connection.

2 Send random challenge message.

3 Encrypt message with private key.

4 Decrypt message with public key.
If messages match, client is authenticated.

Private key

Public key

Creating an SSH Key Pair

- Perform one of the following:
  - Generate an SSH key pair as part of the database deployment creation.
  - Create an SSH key pair before creating your database deployment.
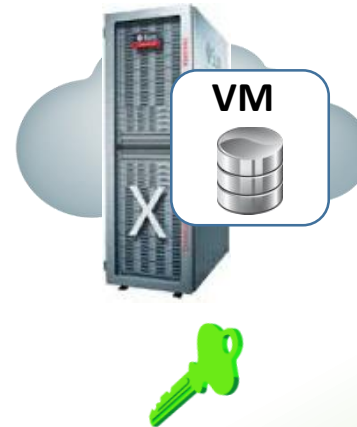
1

Local PC

OPTIONAL: Generate and store a **private** and **public** key pair on a local PC by using the PuTTY keygen utility or on Linux.

2

Cloud server

VM

Create the Database Cloud Service Database deployment, developing the keys as part of the deployment creation, or provide the pre-created **public** key.

Storage Used for Database Files

Storage Volume	Description
bits	30 GB volume completely allocated to `/u01` on the compute node.
boot	21 GB volume allocated to the following file system mounts on the virtual machine: `/` (root), `/boot`, and swap space.
data	GB size equal to the value provided in the Usable Data Storage field during the database deployment creation process, with a minimum of 11 GB. This volume is completely allocated to `/u02` on the compute node.
fra	If backups are configured, GB size equal to 1.7 times the size of the `data` volume. If backups are not configured, GB size equal to 0.1 times the size of the `data` volume, with a minimum of 7 GB. This volume is completely allocated to `/u03` on the compute node.
redo	10 GB volume completely allocated to `/u04` on the compute node.

Summary

- In this lesson, you should have learned how to:
    - Create a DBCS database deployment
    - Describe how an SSH key pair is used in authentication
    - Explain how storage volumes are allocated for a DBCS database deployment

Practice 4: Overview

- 4-1: Creating a Database Deployment