ASSOCIATE EXAM GUIDE

Implementation Associate

Exam Number: PCIA_001

Contents

About Pure Storage® Certified Exams

To be a Pure Storage Certified Implementation Associate is to demonstrate foundational knowledge of how to plan, configure, and install FlashArray™ products. Pure Storage's Certification exams have been developed following industry best practices to strive for reliable and valid test score interpretations.

This guide has two purposes:

- to provide you with the recommended preparations for the Pure Storage Implementation Associate Exam, and
- to help you determine if you are ready to sit for the exam.

This guide outlines the knowledge, skills, and abilities required of a "minimally qualified candidate" for a specific job role, which will be evaluated in the exam.

Section 1: Exam Registration Instructions

1.1. Exam Information

- Exam name: Pure Storage Implementation Associate

- Exam number: PCIA_001

- Exam cost: $129 (US Dollars)

- Number of questions: 60

- Question types: Multiple Choice (four or five options; one, two, or three correct answers)

- Time limit: 120 minutes

1.2. Creating an Online Account

1. Go to the ExamStudio Storefront.

2. Select "Pure Storage Implementation Associate".

3. Either confirm the scheduling process or log in. The system will automatically recognize if you are eligible and will allow you to move forward.

4. Log in to your candidate dashboard and click "Schedule" under the Actions tab.

5. Select the appropriate time zone; then, select the date and time you want to take the exam. Please note that exams require a 24-hour lead time to schedule. The earliest date on which you can make a reservation is the next business day.

6. Complete a technical compatibility check by visiting https://go.proctoru.com/testitout

1.3. Online Exam Computer Requirements

Your computer must meet the minimum requirements of ProctorU, including:

- A stable broadband internet service with a download speed of at least 12Mbps down and 3Mbps up

- Chrome or Firefox web browser. Download ProctorU extensions: Chrome or Firefox

- Webcam

- Microphone

To check if your computer meets the minimum requirements of the exam provider, visit https://go.proctoru.com/testitout. To watch a video on how ProctorU works, please click here.

You will be prompted to download and run a LogMeIn Rescue applet file that will bring up a chat box to allow you to text with your proctor. If prompted, be sure to click "Open" or "Allow" to give the file permission to run. When the chat box says "Waiting," it means that you are in the queue waiting for your proctor.

> **TIP:** If your status shows "Waiting," do not re-download the applet file. You will be put back at the end of the queue. For more information on what to expect on the day of the exam, please visit this link.

1.4. Day of the Exam

Requirements:

- You must provide one form of government-issued photo ID (e.g., driver's license, passport).

- If you do not provide acceptable proof of identification via webcam to the proctor prior to the exam, you will not be allowed to take the exam. No refund or rescheduling is provided when an exam cannot be started due to failure to provide proper identification.

- You must also consent to have your photo taken. The ID will be used for identity verification only and will not be stored.

- You must be in a private, well-lit environment such as a conference room or home office.

- You must close all third-party programs and unplug any secondary monitors.

- The proctor will ask you to show your desk and surroundings before your exam can start.

- You cannot consult notes or books during the exam. The proctor will not allow the use of documents, materials, or websites during the exam.

- Make sure you have downloaded the ProctorU extension for either Chrome or Firefox.

Log in to Launch the Exam

To launch the exam, log in to your ExamStudio account.

1. Enter your login credentials.

2. Click "Start Exam" under the Actions tab on your dashboard.

   NOTE: The timer for your exam does not start until the proctor launches the exam. You will have 120 minutes to complete the exam. You may start your exam once the countdown timer reaches 0:00:00. If you do not start your exam within 15 minutes of this time frame, the system will automatically mark you as a No-Show and you will not be able to take your exam.

Special Considerations

- To reset a forgotten password, visit https://portal2.examstudio.com/ResetPassword.aspx?id=100106. Once you reset your password, you can log in via your candidate portal.

- For additional questions regarding ProctorU, please visit this link.

- For any other additional questions or concerns, please contact the Pure Storage certification team at certadmin@purestorage.com.

1.5. Exam Scoring

- One point is awarded for each correct answer to a single-response or multi-response question.

- No points are awarded for either incorrectly answered or unanswered single-response or multi-response questions.

1.6. After the Exam

Your candidate record will be updated with the results of your exam 24-48 hours following the exam. Please see Section 1.7 of this exam guide for instructions on how to review your candidate record.

If You Pass:

Your candidate record will have an eCertificate when you achieve a certification, as well as a Pure Storage certification logo for this exam. A certification is valid for 2 years, and, upon expiration, you will need to take the exam again.

If You Fail:

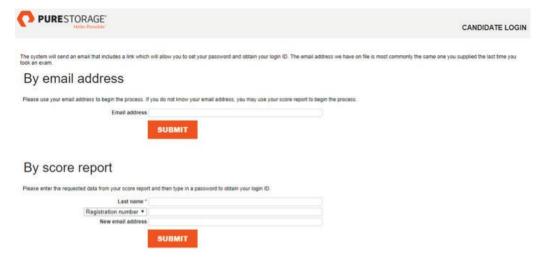You will need to wait 72 hours to re-schedule the exam.

1.7. Your Candidate Record

To access your candidate record, visit https://www.certmetrics.com/purestorage/login.aspx. From here, you will be able to access your score report(s).

The first time you log in, you will need to create an account.

To create an account:

1. Click "Never logged in before?" on the landing page.
2. Enter either your email address or data from your score report, as shown below.

3. You will receive an email with instructions on how to access your account.

Once you create your account, you will be able to log in with your login ID and password.

Section 2: Pure Storage Implementation Associate Exam Topics

2.1. Domain Names

The job tasks measured on the exam are grouped into the following domains of practice:

- Pre-installation
- Installation
- Post-installation

2.2. Task Information

Within each domain, you will be asked about specific tasks you should be able to perform as a Pure Storage Certified Implementation Associate, including but not limited to:

Pre-installation
- Verify site is ready for installation
- Perform pre-installation tasks (e.g., reviewing the checklist, downloading the appropriate version of Purity)

Installation
- Rack the array
- Cable the array
- Initialize the array software
- Engage Support as appropriate

Post-installation
- Verify post install system health
- Troubleshoot install issues
- Share information with customer post-install

2.3. Domain Distribution

The questions on the exam are distributed as follows for each domain.

NOTE: Each question carries the same weight, and there is no partial credit for any question.

Domain	Percent of Exam
Pre-installation	26%
Installation	44%
Post-installation	30%

Section 3: The Pure Storage Certified Implementation Associate Job Role

This exam is designed for individuals who are currently performing or have previous work experience with the job responsibilities of a Pure Storage Certified Implementation Associate.

3.1. The Minimally Qualified Candidate (MQC)

To pass the exam, you must possess at least the minimum level of knowledge, skills, and abilities required of a Pure Storage Certified Implementation Associate. The MQC is a Pure Storage implementation engineer who has between 1 and 3 years of storage industry experience and at least 3 months of Pure Storage experience. The MQC has familiarity with basic CLI commands, Purity features, FlashArray™ architecture, and GUI. Utilizing supporting documents, the MQC is involved in the hardware and software installation and capacity addition of a Pure Storage FlashArray.

The Pure Storage Certified Implementation Associate should be able to perform the following tasks without any assistance:

- Capacity add (drives and shelves)
- Deliver the Pure Customer Experience
- Install Purity software
- Physically install FlashArray hardware
- Prepare and confirm the content for the site preparation survey (types of racks, power, and cooling) prior to installation
- Use and explain the quick install guide for new installs for customers
- Understanding when and how to interact with support
- Install FlashArray: new and capacity upgrades
- Demonstrate user interface to customers
- Validate functionality (health checks)
- Basic cabling (HA power, redundant paths)
- Efficiency/Safety in racking and stacking (weight limitations)
- Understanding of capacity pack sizes
- Identify primary and secondary controller roles
- Understand the difference between FC and ethernet cabling

3.2. MQC Work Experience

A minimally qualified Pure Storage Certified Implementation Associate typically has the following work experience:

- Associate level role
- Between 1 and 3 years of storage industry experience
- Between 3 and 6 months of Pure Storage experience

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Section 4: Determine Exam Readiness

Nothing can guarantee that you will pass your test; however, the more practical work experience you have, the better your chances are to pass the test. Use the self-assessment preparation worksheet (below) to evaluate your level of readiness.

4.1. Exam Prerequisites

There are no prerequisites for the Pure Storage Implementation Associate Examination.

4.2. On-the-Job Experience

Since Pure Storage exams measure knowledge, skills, and abilities for a specific job role, one of the best ways to prepare for the exam is to make sure you have the minimum work experience, as described in this guide.

4.3. Self-Assessment Preparation Worksheet

Use the following worksheet to review the exam topics and assess your own readiness. If you need to prepare more for a certain topic, determine if you need training, on-the-job experience, or both.

I can:

Topic	Yes	No
Pre-installation		
Identify that customer has required physical environment components		
Verify data center access ticket has been opened		
Review checklist		
Engage customer to clarify/correct issues		
Installation		
Install array per quick install guide		
Connect and confirm the new shelf or shelves prior to adding in drives		
Ensure management, power, and data cables are run in a tidy manner		
Copy appropriate code to array		
Perform initial software config of Purity		
Post-installation		
Verify installed version of code is running		
Verify hardware components are healthy		
Confirm customer can access array GUI		
Perform basic troubleshooting in response to given error messages		
Explain support functionality		
Provide GUI walkthrough		
Answer customer questions		

Section 5: Pure Storage Implementation Associate Exam Sample Questions

Review and practice taking exam questions to get a sense for the types of questions on the exam. Please note that **your performance here does not indicate how you will do on the actual exam**. To fully prepare for the exam, closely review the topic areas and objectives in this Exam Guide.

The correct answers are at the end of the exam guide.

1. A customer asks the Implementation Engineer if the customer needs to provide an IP address for eth1 on both controllers.

   In which situation must eth1 be configured with an IP address?
   a. If a proxy is being used
   b. If ActiveCluster is being configured
   c. If iSCSI is being used for hosts
   d. If any form of replication is being configured

2. Which command should an Implementation Engineer enter to check the speed of the I/O ports?
   a. pureboot list
   b. hardware_check.py
   c. purehw list
   d. purearray test array

3. How many RUs are needed for a fully populated FlashArray//X10?
   a. 9U
   b. 6U
   c. 3U
   d. 4U

4. A customer only has 1GB connections available for replication.

   Which ports does Pure recommend be used instead of the default 10GB replication ports?
   a. ETH1 on both controllers
   b. ETH0 on both controllers
   c. 10GB/25GB iSCSI ports on both controllers
   d. ETH0 on the primary controller

5. A customer is having latency issues and would like Pure Storage Support to check the array.

Other than a Zoom session, how else can support access the customer's array in real time?

    a. Customer enables Remote Assist

    b. From the customer's Pure1 account

    c. Connect directly via SSH

    d. Customer provides VPN access

6. A customer provides the following information in the Preinstallation Checklist:

	ADDRESS	NETMASK	GATEWAY
ct0.eth0	192.168.1.253	255.255.255.0	192.168.1.1
ct1.eth0	192.168.1.254	255.255.255.0	192.168.1.1
vir0	192.168.1.255	255.255.255.0	192.168.1.1

Which issue will prevent proper installation?

    a. The controllers are NOT on the same subnet.

    b. The gateway is NOT on the same subnet.

    c. The gateway is NOT valid for the netmask provided.

    d. The VIP is NOT valid for the netmask provided.

7. An Implementation Engineer needs to update Purity//DFS on a Direct Flash shelf.

Which command should the Implementation Engineer run first?

    a. purearray list --controller

    b. purealert tag --maintenance

    c. puresw install --version

    d. puresetup newarray

8. While racking the array, the Implementation Engineers realize that the chassis is too heavy to place in the rack safely.

Which two options will safely reduce the chassis weight? (Select two.)

    a. Remove the NTB switch from the back of the chassis

    b. Install the Flash data packs from the 'open me last' boxes

    c. Remove the power supplies from the chassis

    d. Remove the controllers from the chassis

    e. Unscrew the shelf brackets and remove the shelf from the chassis

9. What is the total number of rack units that will be used by a FlashArray//X array with one direct flash shelf?

    a.   3

    b.   4

    c.   5

    d.   6

10. An Implementation Engineer is assigned a new FlashArray installation. The customer provides a completed preinstallation checklist and indicates that the installation site is a data center.

The customer's maintenance window is 1 am to 5 am.

Which two options should be verified prior to arrival on-site? (Select two.)

    a.   An access ticket has been opened.

    b.   A crash cart is available.

    c.   The equipment has been delivered to the customer's cage.

    d.   A server lift is available.

    e.   The equipment has been pre-racked by the customer.

Section 6: Answer Key

Correct answers are shown below in *bold italics*.

1. A customer asks the Implementation Engineer if the customer needs to provide an IP address for eth1 on both controllers.

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   b. *If ActiveCluster is being configured*

   c. If iSCSI is being used for hosts

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   c. *purehw list*

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Support

For information on Pure Storage's certification programs, visit this link. To contact us, please send an email to certadmin@purestorage.com.