



SolarWinds Certified Professional (SCP) Study Guide

Database Performance Analyzer (DPA)

How to Use This Study Guide

This study guide includes topics found on the SolarWinds Certified Professional[®] (SCP) Database Performance Analyzer (DPA) exam. Use the available SolarWinds documentation to search and learn more about each category.

The intention of the topics in this guide are to supplement your years of experience and hands-on training with SolarWinds[®] products.

This guide is **not** all-inclusive and should only be used as a starting place for your SCP studies.

If you have a SolarWinds product under active maintenance, you have access to virtual and on-demand training.

To access SolarWinds Academy classes, follow these steps:

1. Log in to your Customer Portal account at <https://customerportal.solarwinds.com>
2. Click Education and Training > Virtual Classrooms
3. Browse the available classes and select an option:
 - o Click Register Now for a live class
 - o Click the on-demand link to access a recorded course video

SolarWinds Academy adds available classes to the [Virtual Classroom calendar](#) every month.

Note: SolarWinds Academy classes are additional study resources and aren't explicitly designed for the SCP exam.

For additional study resources, visit the [THWACK[®]](#) community.

Exam Content Outline

- 1.1 Recognize the hardware, software, and port requirements for DPA.
(Questions related to these tasks make up 6% of the exam.)
 - 1.1.1 Pre-installation requirements for both the web client and repository.
 - 1.1.2 Server requirements based on workload.
 - 1.1.3 Credentials for the database instance hosting a repository.
 - 1.1.4 Repository database sizing.

- 1.2 Compare license types and user options for implementing and managing licenses.
(Questions related to these tasks make up 9% of the exam.)
 - 1.2.1 Perpetual and subscription licenses.
 - 1.2.2 Category 1 license.
 - 1.2.3 Category 2 license.
 - 1.2.4 Azure® SQL Database license.
 - 1.2.5 Floating licenses.
 - 1.2.6 VM option licenses.
 - 1.2.7 Licensing for clustered environments.
 - 1.2.8 AWS® metering service.

- 1.3 Recognize the different types of database instances to register and monitor.
(Questions related to these tasks make up 2% of the exam.)
 - 1.3.1 Self-managed options.
 - 1.3.2 Cloud/software as a service (SaaS) options.

- 1.4 Explain the setup and functions of DPA architecture.
(Questions related to these tasks make up 7% of the exam.)
 - 1.4.1 DPA server.
 - 1.4.2 DPA repository database.
 - 1.4.3 Database instances to monitor.

- 1.5 Configure user accounts and assign roles and privileges.
(Questions related to these tasks make up 5% of the exam.)
 - 1.5.1 Administrator role.
 - 1.5.2 User Manager role.
 - 1.5.3 Read Only on All Instances role.
 - 1.5.4 Custom Privileges role.

- 1.6 Explain how to configure Active Directory® or LDAP in DPA.
(Questions related to these tasks make up 2% of the exam.)
 - 1.6.1 Connection requirements.
 - 1.6.2 Port requirements.

- 1.7 Explain how to manage SQL statements in DPA.
(Questions related to these tasks make up 8% of the exam.)
 - 1.7.1 Name SQL statements.
 - 1.7.2 Exclude SQL statements.
 - 1.7.3 Add excluded SQL statements back to DPA.
 - 1.7.4 Find SQL statements.
 - 1.7.5 Apply filters and search strings to find SQL.

- 1.8 Implement DPA tools to resolve common database performance issues.
(Questions related to these tasks make up 18% of the exam.)
 - 1.8.1 Using query and table tuning advisors.
 - 1.8.2 Identifying problematic SQL statements.
 - 1.8.3 Identifying current and historical performance.

- 1.8.4 Wait types.
- 1.8.5 Blocking and deadlock identification.
- 1.8.6 Anomaly detection.
- 1.8.7 DPA annotations.
- 1.9 **Perform DPA alert tasks.**
(Questions related to these tasks make up 20% of the exam.)
 - 1.9.1 View the status and history of DPA alerts.
 - 1.9.2 Identify DPA alert categories and types.
 - 1.9.3 Configure a DPA wait time alert.
 - 1.9.4 Configure a DPA resources alert.
 - 1.9.5 Configure a DPA administrative alert.
 - 1.9.6 Configure a DPA custom alert.
 - 1.9.7 Configure a DPA REST API alert.
 - 1.9.8 Send SNMP traps from DPA alerts.
 - 1.9.9 Set up alert blackouts.
 - 1.9.10 Create a DPA alert group.
 - 1.9.11 Create and manage DPA contacts and contact groups.
 - 1.9.12 Notification policy for DPA alerts.
 - 1.9.13 Create an alert email template.
- 1.10 **Perform DPA report tasks.**
(Questions related to these tasks make up 8% of the exam.)
 - 1.10.1 Explain available report types and differences between report data and chart data.
 - 1.10.2 Access and run existing DPA reports.
 - 1.10.3 Create a new DPA report.
 - 1.10.4 Search for an SQL statement to include in a report.
 - 1.10.5 Schedule a DPA report for email delivery.
 - 1.10.6 Create a DPA report group.
- 1.11 **DPA scalability.**
(Questions related to these tasks make up 2% of the exam.)
 - 1.11.1 Explain how to link separate SolarWinds DPA servers together using DPA Central.
 - 1.11.2 Understand the DPA scalability engine guidelines.
- 1.12 **Use the REST API to securely connect the DPA server and issue commands.**
(Questions related to these tasks make up 7% of the exam.)
 - 1.12.1 Manage tokens used for authentication to the DPA API.
 - 1.12.2 Access the DPA API documentation and get authorization to make API calls.
 - 1.12.3 Make an API call from the Swagger interface.
- 1.13 **SolarWinds Platform integrations.**
(Questions related to these tasks make up 6% of the exam.)
 - 1.13.1 Explain how to integrate DPA with the SolarWinds Platform.
 - 1.13.2 Recognize how DPA can utilize AppStack™ and PerfStack™.
 - 1.13.3 Explain how to create DPA alerts and reports in the SolarWinds Platform.
 - 1.13.4 Recognize how DPA can integrate with AppInsight™ for SQL Server®.

Exam Resources

	Guides	Item Resources
1.1.1		https://documentation.solarwinds.com/en/success_center/dpa/content/system_requirements/dpa_2022-4_system_requirements.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/install-create-repository-database.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/install-dpa-preflight.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/install-dpa-requirements.htm
1.1.2		https://support.solarwinds.com/SuccessCenter/s/article/Change-the-default-ports-in-DPA?language=en_US , https://documentation.solarwinds.com/en/success_center/dpa/content/install-dpa-requirements.htm , https://support.solarwinds.com/SuccessCenter/s/article/Specify-the-Java-installation-that-DPA-uses-Linux?language=en_US
1.1.3		https://documentation.solarwinds.com/en/success_center/dpa/content/install-dpa-requirements.htm
1.1.4	DPA Installation and Upgrade Guide	
1.2.1		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa_licensing_model.htm
1.2.2		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa_licensing_model.htm
1.2.3	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa_licensing_model.htm
1.2.4		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa_licensing_model.htm
1.2.5		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa_licensing_model.htm
1.2.6		https://documentation.solarwinds.com/en/success_center/dpa/content/system_requirements/dpa_2022-4_system_requirements.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa_licensing_model.htm , https://support.solarwinds.com/SuccessCenter/s/article/Java-VM-needed-in-DPA?language=en_US
1.2.7		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-recommendations-for-registering-clusters.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-sql-server-ags.htm
1.2.8		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa_licensing_model.htm
1.3.1	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-register-a-database-instance-for-monitoring.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-database-versions-you-can-monitor.htm , https://support.solarwinds.com/SuccessCenter/s/article/Configure-DPA-to-use-a-custom-certificate-for-SSL-TLS?language=en_US , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-recommendations-for-registering-clusters.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-set-advanced-options.htm
1.3.2		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-register-an-azure-sql-database.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-database-versions-you-can-monitor.htm
1.4.1	DPA Installation and Upgrade Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-architecture.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/system_requirements/dpa_2022-4_system_requirements.htm

1.4.2	DPA Installation and Upgrade Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-architecture.htm , https://support.solarwinds.com/SuccessCenter/s/article/Move-a-DPA-repository-on-SQL-Server?language=en_US , https://documentation.solarwinds.com/en/success_center/dpa/content/system_requirements/dpa_2022-4_system_requirements.htm
1.4.3		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-database-versions-you-can-monitor.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa_licensing_model.htm
1.5.1		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-create-a-user.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-dpa_roles_privileges.htm
1.5.2		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-dpa_roles_privileges.htm
1.5.3		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-view-resource-metrics.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-dpa_roles_privileges.htm
1.5.4		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-dpa_roles_privileges.htm
1.6.1		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-users-and-groups.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-configure-ad-or-ldap.htm , https://support.solarwinds.com/SuccessCenter/s/article/Move-DPA-to-another-server?language=en_US
1.6.2		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-configure-ad-or-ldap.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/install-dpa-requirements.htm
1.7.1		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-name-sql-statement.htm
1.7.2		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-exclude-sql-statements.htm
1.7.3		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-add-excluded-sql-statements-back.htm
1.7.4		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-enable-find-sql-feature.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-search-for-sql-statement-investigate.htm
1.7.5	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-search-for-sql-statement-investigate.htm
1.8.1	DPA Getting Started Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-access-tuning-advisors.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-table_tuning_advisors.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-view-resource-metrics.htm
1.8.2	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-view-data-trends-chart.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-table_tuning_advisors.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/gettingstarted/dpa-gs-investigate-sql.htm

1.8.3	DPA Getting Started Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-show-hide-vm-events-metric-charts.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-introduction.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-view-data-trends-chart.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-exclude-sql-statements.htm
1.8.4	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-view_query_details.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-table_tuning_advisors.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/gettingstarted/dpa-gs-wait-based-monitoring.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-architecture.htm , https://support.solarwinds.com/SuccessCenter/s/article/SQL-Server-Wait-Types?language=en_US
1.8.5	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-identify-locks-blocks.htm
1.8.6	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-about-wait-time-anomalies.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/install-dpa-requirements.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-exclude-sql-statements.htm
1.8.7		https://support.solarwinds.com/SuccessCenter/s/article/How-to-use-annotations-in-DPA-Video?language=en_US , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-annotate_db.htm
1.9.1	DPA Administration Guide	
1.9.2	DPA Administration Guide	
1.9.3		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-create-wait-time-alert.htm
1.9.4	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-create-resources-alert.htm
1.9.5	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-create-admin-alert.htm
1.9.6	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-create-custom-alert.htm
1.9.7		https://www.solarwinds.com/documentation/dpa/flare/20224/content/dpa-use-swagger-interface.htm?cshid=useAPI , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-use-swagger-interface.htm
1.9.8	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-snmp-alerts.htm
1.9.9	DPA Administration Guide: DPA Alerts	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-stop-monitoring-a-database-instance-for-a-period-of-time.htm
1.9.10		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-create-alert-group.htm
1.9.11	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-create-email-contact.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-dpa_roles_privileges.htm
1.9.12		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-notification-policy-for-alerts.htm

1.9.13	DPA Administration Guide	
1.10.1	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-about-reports.htm
1.10.2	DPA Administration Guide	
1.10.3	DPA Administration Guide	
1.10.4		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-search-for-sql-statement.htm
1.10.5		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-schedule-a-report-for-email-delivery.htm
1.10.6	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-create-report-group.htm
1.11.1	DPA Administration Guide	
1.11.2	SolarWinds Customer Success	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-central-server-advanced-configuration.htm , https://support.solarwinds.com/SuccessCenter/s/article/Scale-DPA-for-number-of-monitored-databases?language=en_US , https://documentation.solarwinds.com/en/success_center/orionplatform/content/orion_platform_scalability_engine_guidelines.htm
1.12.1	DPA Administration Guide	
1.12.2	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-use-swagger-interface.htm
1.12.3		https://documentation.solarwinds.com/en/success_center/dpa/content/dpa-use-swagger-interface.htm
1.13.1	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpaim-dpa-data-in-the-orion-web-console.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpaim-integrate-dpa-with-orion-platform-products.htm , https://documentation.solarwinds.com/en/success_center/dpa/content/dpaim-dpa-and-sam-integration.htm
1.13.2	DPA Integration Model (DPAIM) Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpaim-database-instances-in-the-appstack-environment.htm , https://documentation.solarwinds.com/en/success_center/sam/content/sam-appinsight-for-sql-dpaim.htm , https://support.solarwinds.com/SuccessCenter/s/article/DPAIM-11-1-feature-DPA-data-in-PerfStack?language=en_US
1.13.3	DPA Administration Guide	https://documentation.solarwinds.com/en/success_center/dpa/content/dpaim-dpa-alerting-in-the-orion-platform.htm
1.13.4	DPA Integration Model (DPAIM) Administration Guide	https://documentation.solarwinds.com/en/success_center/sam/content/sam-appinsight-for-sql-sw1261.htm