

## Administering SAS® Viya® Exam

### Managing a SAS Viya Environment (35% – 40%)

#### Understand and administer programming run-time servers

- Administer SAS Studio.
- Server configuration instances.
- Configure contexts.
  - Compute
  - Launcher
  - Batch
  - Connect

#### Administer the CAS Server

- Manage and understand CAS roles.
- Understand CAS server configuration instances.
- CAS disk cache.

#### Update a SAS Viya deployment

- Update SAS License.
- Understand contents of software order.
- Apply patch updates.
- Understand SAS release cadence.
- Understand a use case for a mirror registry.

#### Backup and restore SAS Viya environment

- Best practices for performing backups.
- Describe the contents of a backup.
- View backup and recovery history.
- Modify backup schedule.
- Perform a restore from a backup.

#### Understand and administer Viya servers and services

- Scale servers and services .
- Understand server components.
- How to launch programming runtime servers.

#### Understand SAS Viya architecture

- Define the node pools of SAS Viya architecture.
  - CAS server
  - Compute server

- Stateful
- Stateless
- Provide the purpose of the supporting infrastructure services.
  - Consul
  - RabbitMQ
  - Monitoring tools
  - Log tools

## Monitoring, logging and troubleshooting in a SAS Viya Environment (15% – 20%)

### Monitor the SAS Viya Environment

- Modify logging levels using Environment Manager.
- Evaluate resources available.
- Diagnose server and service problems using logs.
- Monitor CAS sessions.
- Monitor services.
- Explore system and audit reports.
- SAS Viya Monitoring for Kubernetes

### Configure CAS server and services logging

## Identity and User management (10% – 15%)

### Manage SAS Viya identities

- Identity synchronization with identity provider: identity filtering, identity caching; configuration properties.
- Manage membership of custom groups and CAS roles (understand difference between groups and custom groups).
- CASHostAccountRequired Custom Group.
- Reset sasboot password if necessary or not required.
- Set up assumable custom group SAS Administrators.
- Set up membership to CAS superuser role.
- Modify memberships to other custom groups.

### Manage external credentials

- Create authentication domains.
- Make a distinction between authentication domains, connection domain, and encryption domains.
- Manage stored credentials.

## Content and Functionality Management (15% – 20%)

## Migration

- Import content from SAS 9.
- Import content from SAS Viya 3.x.
- Import content from SAS Viya 4.
- Use EVM or the CLI tools to promote and map resources.

## Manage and secure SAS Viya Content

- Navigate the folder content structure: shortcuts; predefined folders; child members; reference members.
- Create folders through EV or CLI; view content properties.
- View and edit authorization for folders and folder objects.
- Manage access to folders and objects (through authorization window in EV; CLI; rules page in EV); Sharing.
- Troubleshoot authorization issues.

## Administer Access to functionality

- Modify rules in order to limit or grant more access to the capabilities of Viya applications.
- Give users, groups, and custom groups access to functionality.

# Data management in SAS Cloud Analytic Services (CAS) (10% – 15%)

## Create and manage caslibs

- Understand CAS data architecture.
- Understand loading data into CAS memory.
- Use an authentication domain in a caslib definition.

## Perform data management tasks

- Manage CAS authorizations.
- Manage User-defined formats.
- Understand CAS table state management.

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**Note:** All 15 main objectives will be tested on every exam. The expanded objectives are provided for additional explanation and define the entire domain that could be tested.