Assessment Guide

# The Foundation for Your Successful SAS Modernization

Do you still have uncertainties regarding technology selection, need a feasibility assessment, or require a cost estimate for your SAS migration project?
We recommend starting your modernization journey with an assessment. This guide is based on our extensive experience with modernization projects in the SAS environment and helps you plan and execute your assessment in a well-founded and successful manner.

Identify your requirements, structure the next steps, and establish a solid decision-making foundation for modernizing your SAS environment.

## Objectives of the Assessment

- **Clarify requirements:** Precisely define the technical and organizational framework – from platform requirements to IT guidelines.
- **Define tasks:** Provide a clear overview of the necessary actions.
- **Plan resources:** Create realistic effort estimates and timelines as a foundation for a structured implementation.

## What to Expect in the Guide

The guide is divided into three sections that will lead you step by step through the assessment. Each section includes a practical checklist with clear tasks and questions to help you structure your assessment effectively.

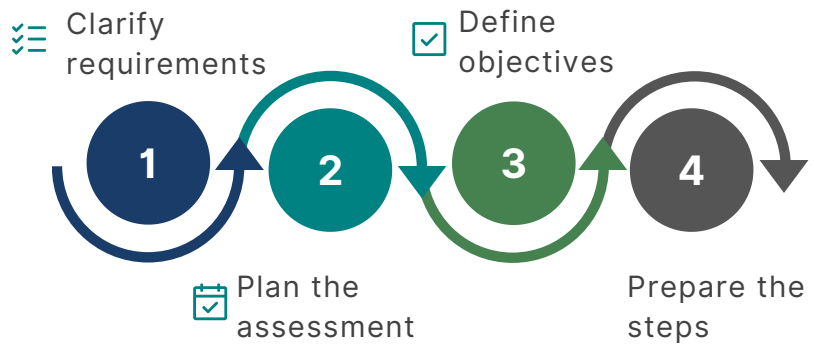
**Section 1 – Requirements and Framework Conditions**
Assess the initial situation and clarify technical and organizational fundamentals.

**Section 2 – Assessment Planning**
Define the objectives, milestones, and deliverables the assessment should provide.

**Section 3 – Results and Deliverables**
Document target architectures, effort estimates, and project milestones.

## Your Path from Idea to Successful Implementation

This is how the three sections of the assessment logically build upon each other:



# Section 1 – Requirements and Framework Conditions

Establish a solid foundation

In this phase, you clarify all relevant requirements and framework conditions to provide HMS experts and consultants with the necessary information for a well-founded planning process.

## Key Questions and Tasks

### Requirements and Framework Conditions

- [ ] **Define requirements for new platforms and tools**
  Which technologies (e.g., CI/CD, GitOps, Terraform) are necessary?
- [ ] **Identify architecture drivers**
  Which key factors influence the selection of the target architecture?
- [ ] **Define interfaces**
  Which databases, file shares, and authentication systems are involved?
- [ ] **Scheduling and batch processing**
  Which recurring tasks or processes need to be automated?
- [ ] **Outline the migration scope**
  Which components (code, data) need to be migrated?
- [ ] **Clarify IT requirements**
  Which security and governance policies apply?

### Project Requirements

- [ ] **Define timeline and deadlines**
  Are there fixed deadlines or milestones?
- [ ] **Define budget requirements**
  What is the financial framework?
- [ ] **Clarify responsibilities**
  Which tasks are defined between your team and HMS?
- [ ] **Include maintenance and operations**
  How will the target environment be operated, and by whom?
- [ ] **Define success criteria**
  How will project success be measured?

### Inventory Assessment

- [ ] **Analyze the number and complexity of SAS objects**
  **Which programs, macros, and projects exist?**
- [ ] **Review data inventory and processing**
  How large is the data warehouse, and what data volumes are being processed?
- [ ] **Determine resource requirements**
  What resources (CPU, RAM, storage) are currently needed and anticipated for the future?
- [ ] **Outline processes and workflows**
  What batch processing, ad-hoc reports, or interactive analyses are in place?
- [ ] **Identify affected users**
  Which users work with the current system, and how do they use it?

**Tip** Use this step to gather all relevant information and proactively involve interfaces you have not yet engaged with.

## Section 2 – Planning and Execution of the Assessment

Define targeted actions

In this section, you define the activities to be carried out during the assessment.

### Key Questions and Tasks

#### Strategy and Planning

- [ ] **Define SAS strategy:**
  Which functions will remain, be replaced, or modernized?
- [ ] **Develop target architecture:**
  What options (cloud, on-premise, hybrid) are available, and what benefits do they offer?

#### Workshops and Testing

- [ ] **Conduct workshops:**
  Analyze requirements and processes, identify potentials, and document findings.
- [ ] **Plan testing strategy:**
  Define acceptance criteria and create test plans.

#### Security and Access Control

- [ ] **Define technical requirements for the target environment:**
  What networks, firewalls, and user access controls are required?
- [ ] **Review security requirements:**
  Which security policies protect data and systems?

#### Optional Tasks

- [ ] **Evaluate the SAS-to-Python migration tool:**
  Is an automated translation feasible?
- [ ] **Conduct SAS Content Assessment:**
  Analyze content and structures, identify migration potential.
- [ ] **Implement Proof of Concept:**
  Validate technologies or processes in a secure test environment.
- [ ] **Develop training concepts:**
  What training do users need?

**Tip** Use workshops to gather requirements and establish a shared understanding. This promotes acceptance and helps prevent later adjustments.

## Section 3 – Results and Deliverables

Define desired outcomes and key focus areas

In this section, you define the objectives of the assessment and determine the format in which the results should be presented. This information serves as the foundation for evaluating and strategically planning the migration project.

### Key Questions and Tasks

#### Document results

- [ ] **Define target architecture:** What does the target platform look like, and which data flows need to be considered?
- [ ] **Create target architecture diagram:** Visualize the planned platform and interfaces.
- [ ] **RDocument risks:** What challenges exist, and how can they be mitigated?

#### Estimate costs and efforts

- [ ] **Create effort estimates for the migration:**
  - Data migration: What is the effort required to transfer existing data?
  - Code migration: What adjustments and revisions are necessary?
- [ ] **Estimate effort for building the target platform:** What resources and timelines are required?
- [ ] **Calculate total costs:** What are the costs for operation, licenses, and maintenance of the target platform?

#### Project Planning

- [ ] **Develop project plan:** What milestones and timelines are required?
- [ ] **Visualize project plan:** Create an overview with responsibilities and timelines.
- [ ] **Define responsibilities:** Who is responsible for which tasks?
- [ ] **Document decisions:** Which components will be migrated, which will not, and what framework conditions need to be considered?

#### Optional Tasks

- [ ] **Develop training concept:** What training do users need?
- [ ] **Conduct a detailed risk analysis:** How might various risks arise, and how can they be mitigated?

**Tip** Document the target architecture and effort estimates precisely. A clear foundation facilitates the handover to implementation teams and ensures a smooth project start.

## Your Benefits with Our Structured Assessment

This guide helps you successfully plan and execute all key steps of an assessment – from clarifying requirements to documenting results. This ensures a solid foundation for successful implementation.

- ☑ **Create clarity:** Requirements, objectives, and responsibilities are precisely documented.
- ☑ **Minimize risks:** Potential challenges are identified early on.
- ☑ **Increase efficiency:** Early decisions before migration accelerate implementation.

You now have a comprehensive tool to structure and successfully execute your SAS modernization project.

## Ready to drive your SAS modernization planning forward?

Our experienced team supports you in every phase – from analysis to implementation. Together, we ensure that your SAS modernization runs smoothly and achieves long-term success.

### Your Contact Person

Andreas Menrath is your expert contact for all questions regarding your SAS modernization project. He supports you step by step – from planning to successful implementation.




**Andreas Menrath**
**Solution Lead**

+49 6221 6051 167
+49 1761 6051 167

migration@hms-data.de


Schedule an appointment now

## Achieve success together – Start your SAS migration today!