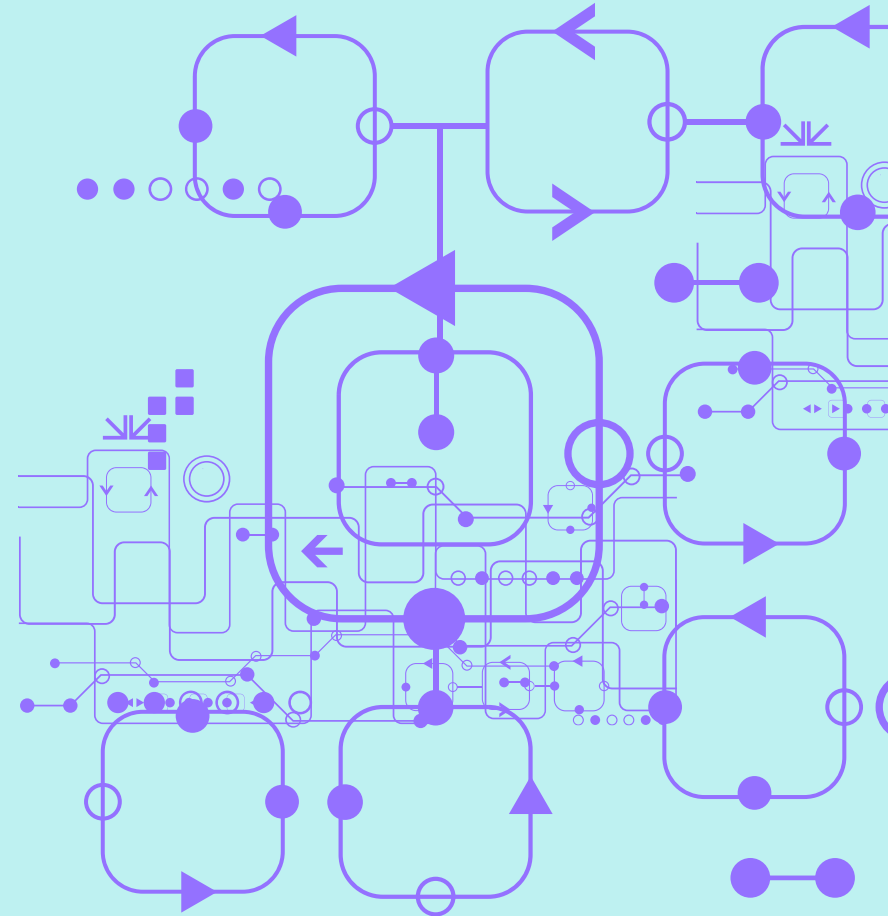




SAS Analytics Pro Advanced Programming®





ASK THE EXPERT

What Are the New Capabilities of SAS® Analytics Pro Advanced Programming?

Lucas de Paula

Senior Solutions Architect for Data Science





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Senior Solutions Architect for Data Science

Lucas de Paula loves connecting SAS technology to different industries. He is always learning new things but remains focused on the data science field.

An easy-to-use, yet powerful package

Analytics Pro Advanced Programming



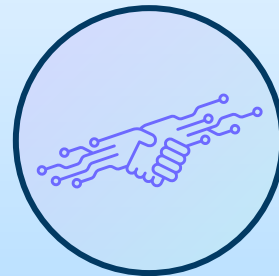
Access, manipulate, analyze and present information – for cloud and on-site deployment



Use innovative statistical techniques for time series, optimization, statistics, data preparation and much more



Create shareable analysis, reporting and easy-to-understand visualizations from one vendor



Improve productivity with all the data analysis tools you need in one package



Integrate data and meet compliance mandates

The Software



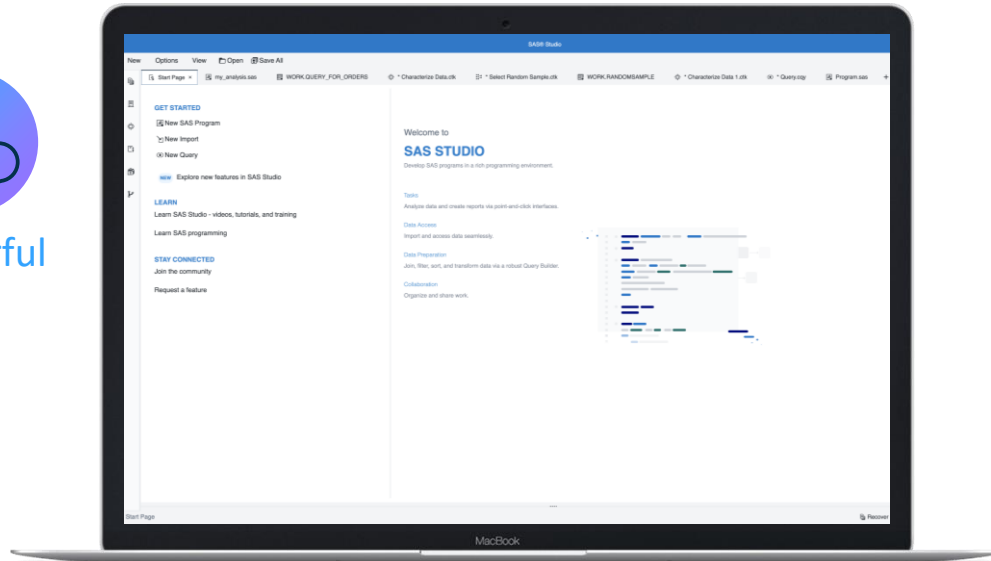
Integrated



Powerful



Intuitive



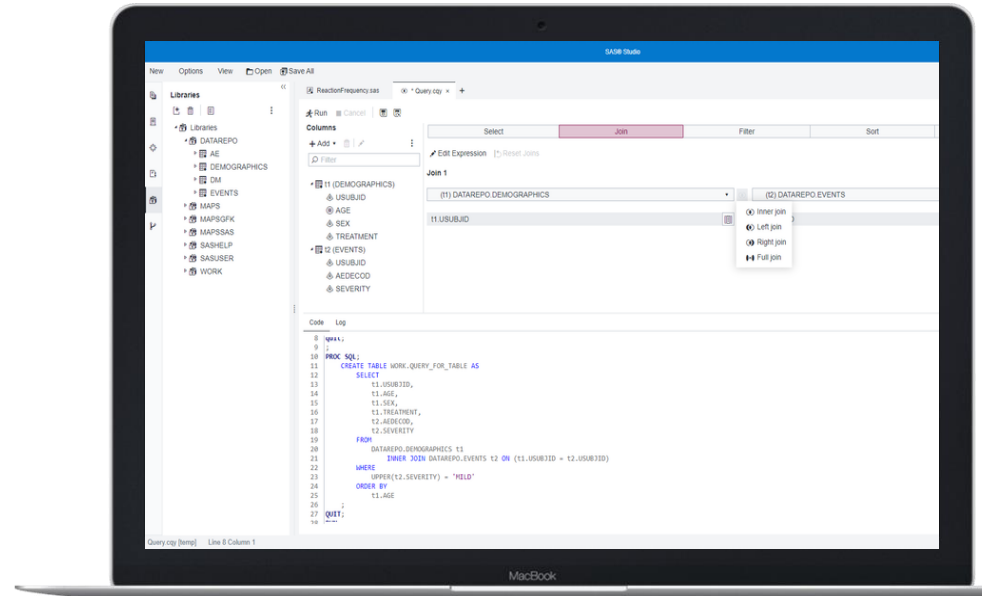
Packages

- BASE
- STAT
- GRAPH
- OR
- ETS
- IML
- QC

What can you achieve?

Data and code access

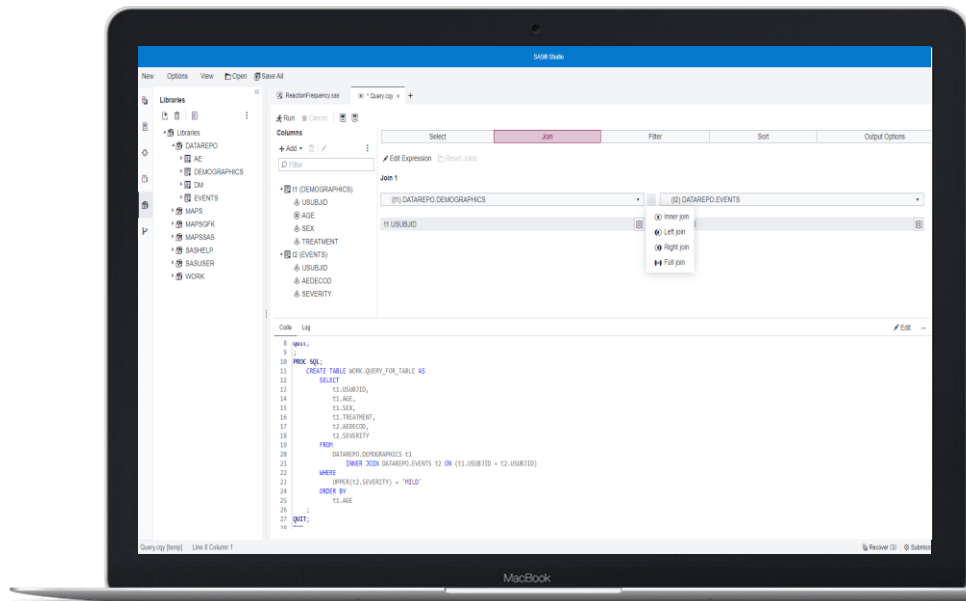
- Access data from multiple data sources
- Leverage all your existing programs from SAS 9 workflows



What can you achieve?

Data preparation and unified UI

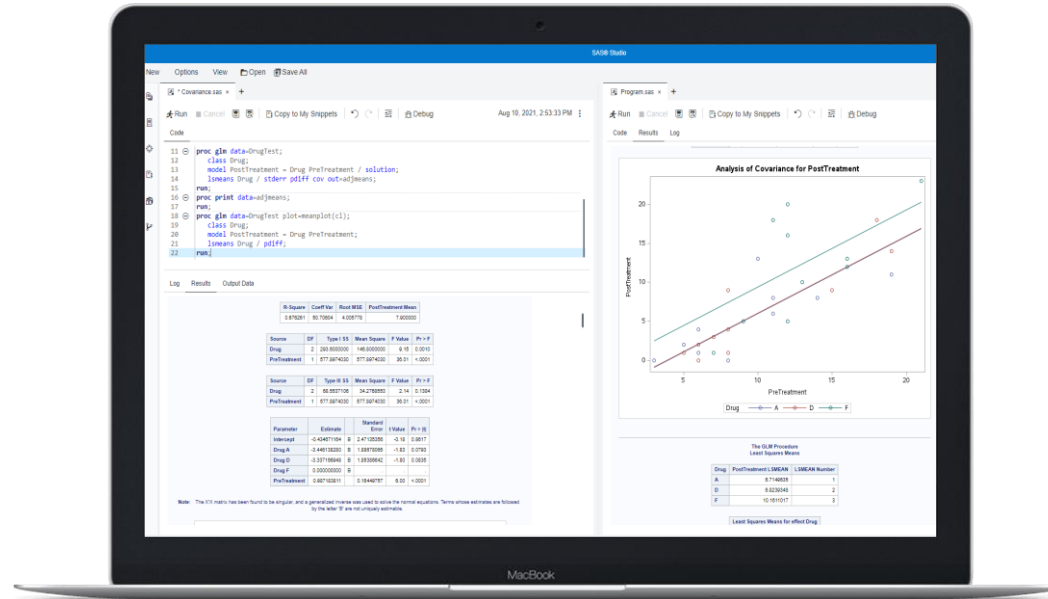
- Low Code or Coding
- Specially designed for data access, transformation and reporting
- Includes a rich library for:
 - Data manipulation
 - Descriptive statistics
 - Report



What can you achieve?

Statistical analysis

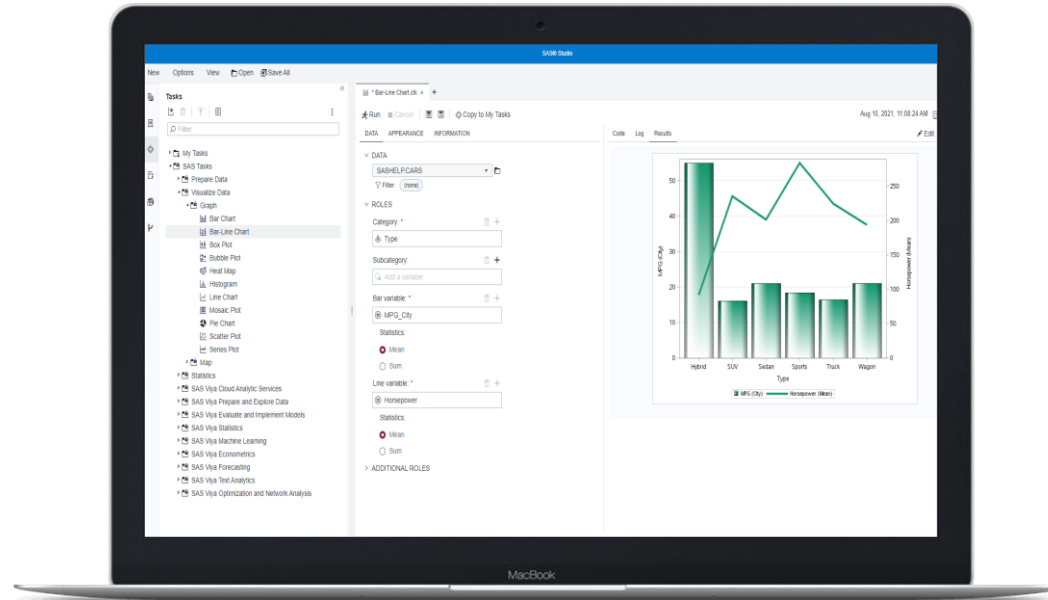
- Capabilities include:
 - Traditional analysis of variance
 - Linear regression
 - Bayesian inference
 - Causal inference
 - High-performance modeling tools for massive data



What can you achieve?

Data visualization, presentation and delivery

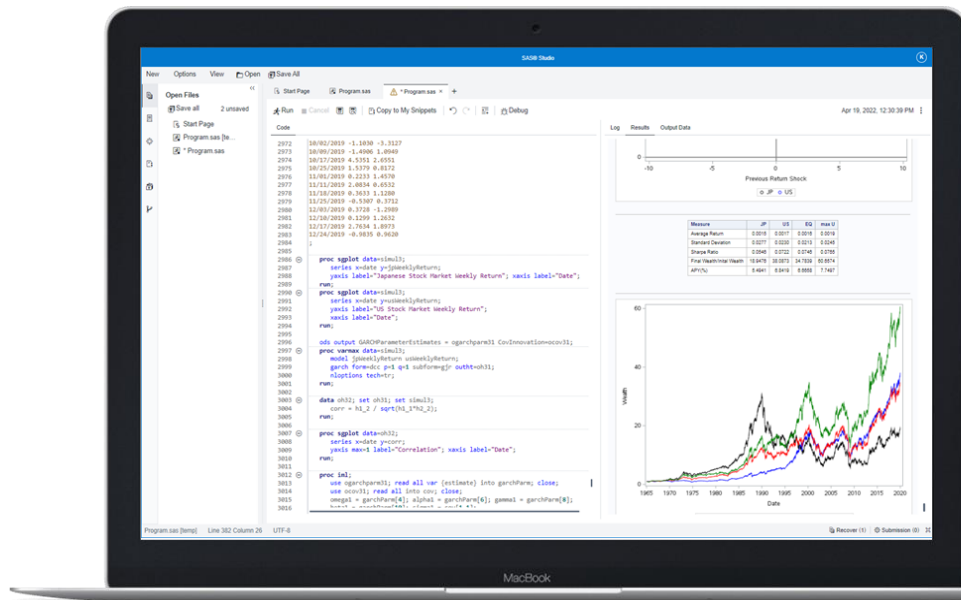
- Provides visuals to all levels of your organization
- Quick and easy to understand information for making informed, timely decisions
- Extends the power of SAS data management, business intelligence and analytic tools



What can you achieve?

High-performance econometric procedures

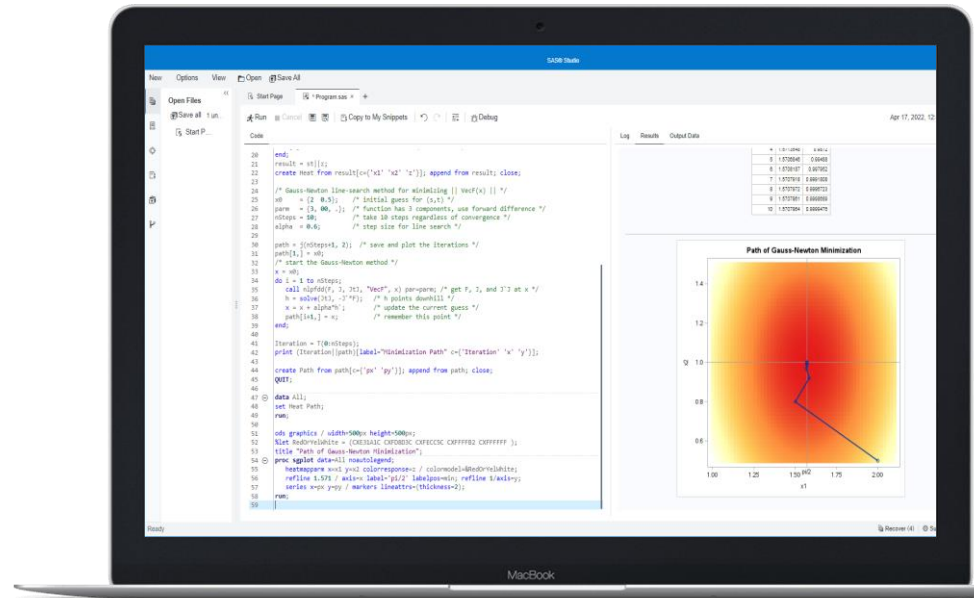
- Econometric, time series and forecasting techniques
- Model, forecast and simulate business processes on observational data for improved strategic and tactical planning



What can you achieve?

Powerful, flexible matrix programming language

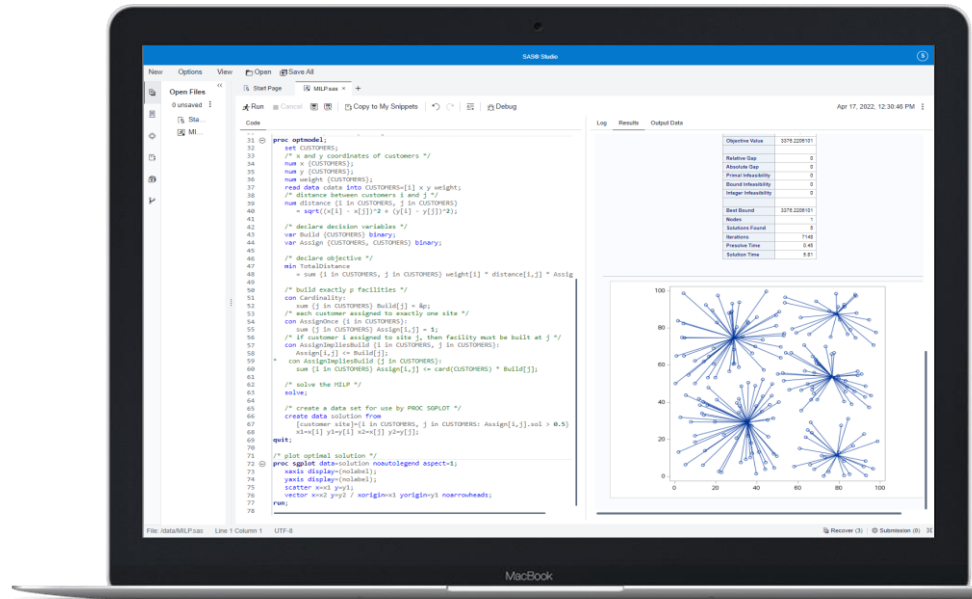
- Provides interactive programming and exploratory data analysis
- Simple syntax makes it easy to translate mathematical formulas into program statements
- Program easily with arithmetic and character expressions



What can you achieve?

Operations research

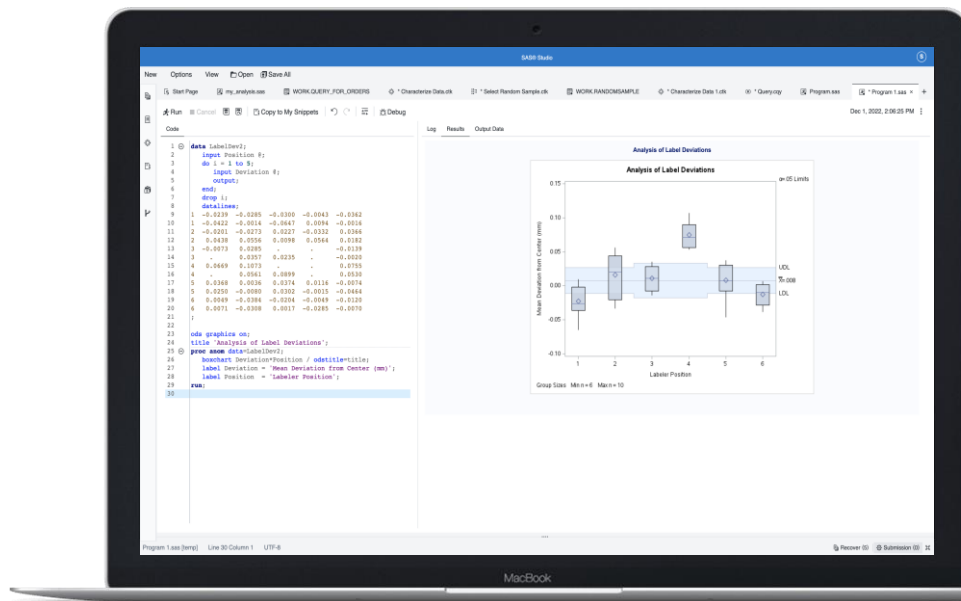
- Offers the broadest available spectrum of optimization:
 - Project scheduling
 - Simulation software for identifying the best responses to complex planning problems
- Business challenges addressed:
 - Resource allocation and staffing
 - Product mix
 - Logistics and supply chain optimization
 - Capital budgeting and portfolio selection



What can you achieve?

Statistical process control

- Help organizations identify and understand the sources of process variation
- Improve product quality optimized processes
- Increase customer satisfaction



How can you use it?

Usage patterns

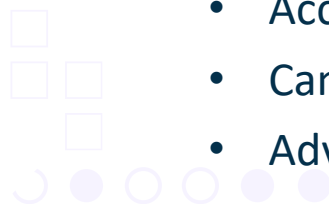
- Program in SAS or Python
- Run SAS on desktop (Mac, linux, windows)
- Run on the server or cloud
- Run programs in batch mode



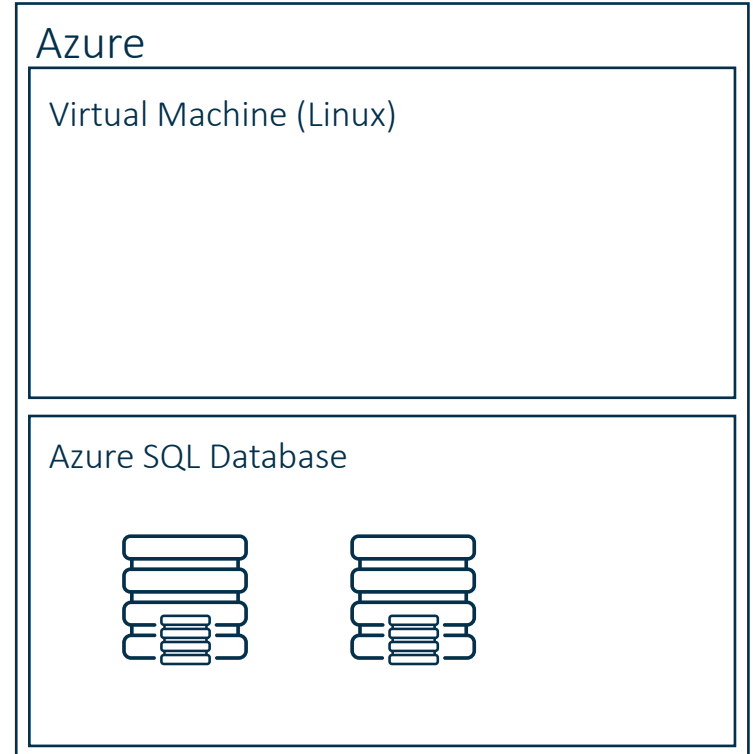
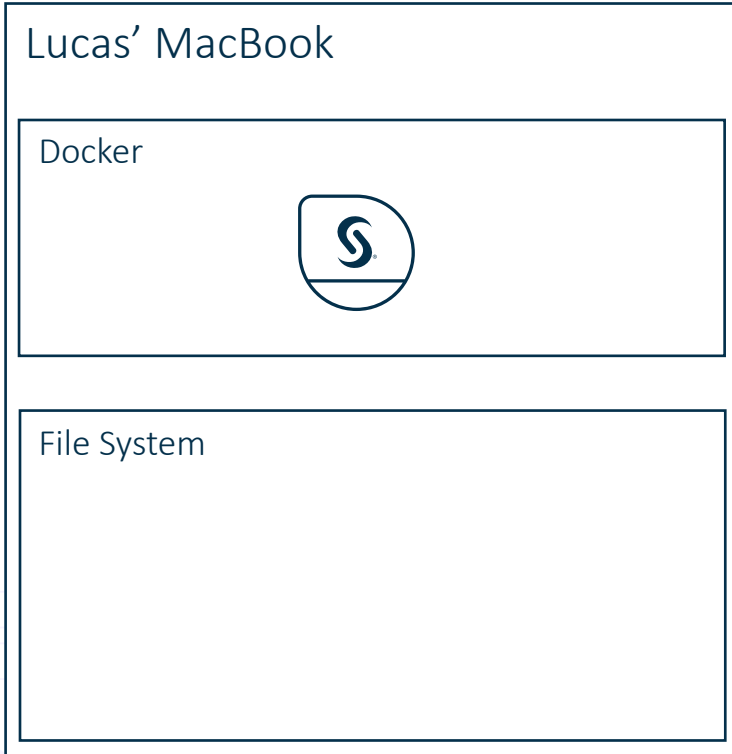
Analytics Pro on Viya

Advantages

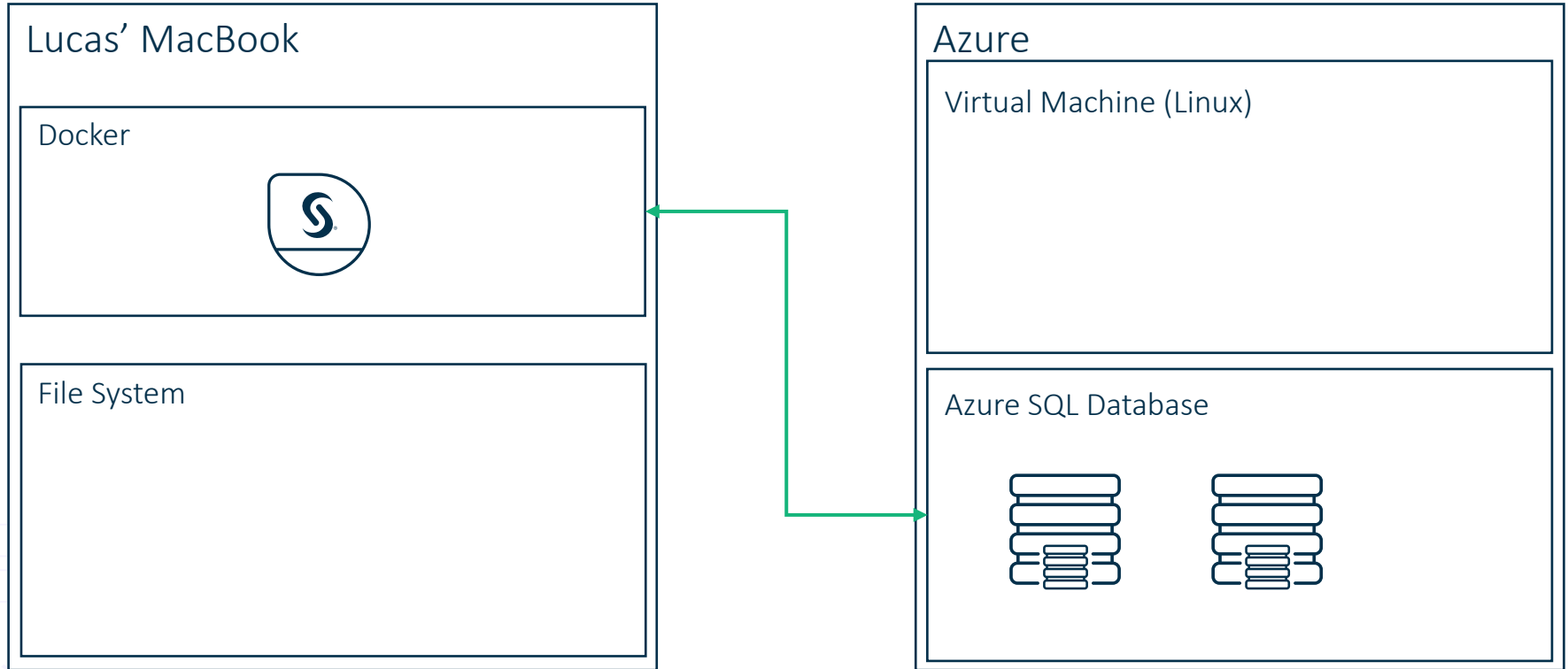
- Containerized Application
- Monthly Updates
- Additional Functionality
 - All main SAS packages
 - Python integration
 - Deploy anywhere
 - Access to all databases supported by SAS included
 - Can be run in a multi-user environment
 - Advanced users can deploy on Kubernetes



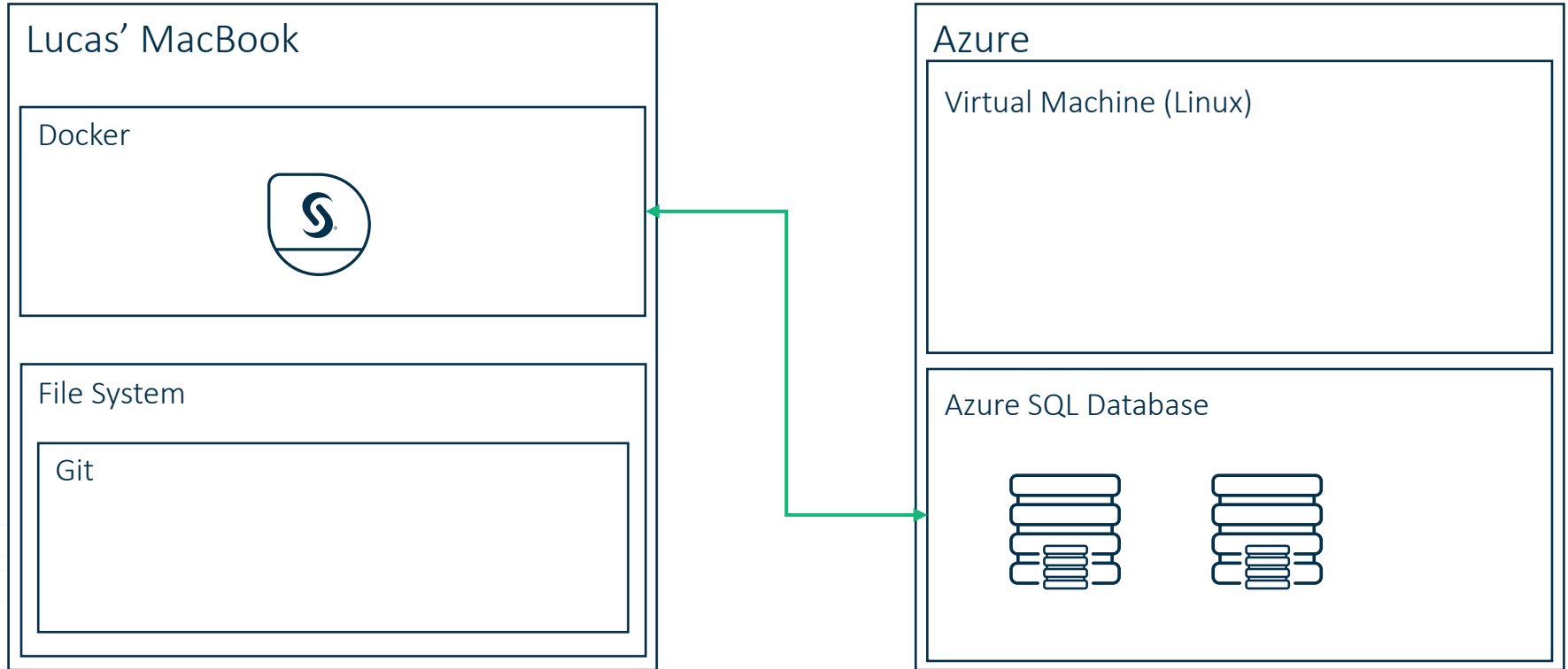
The demonstration



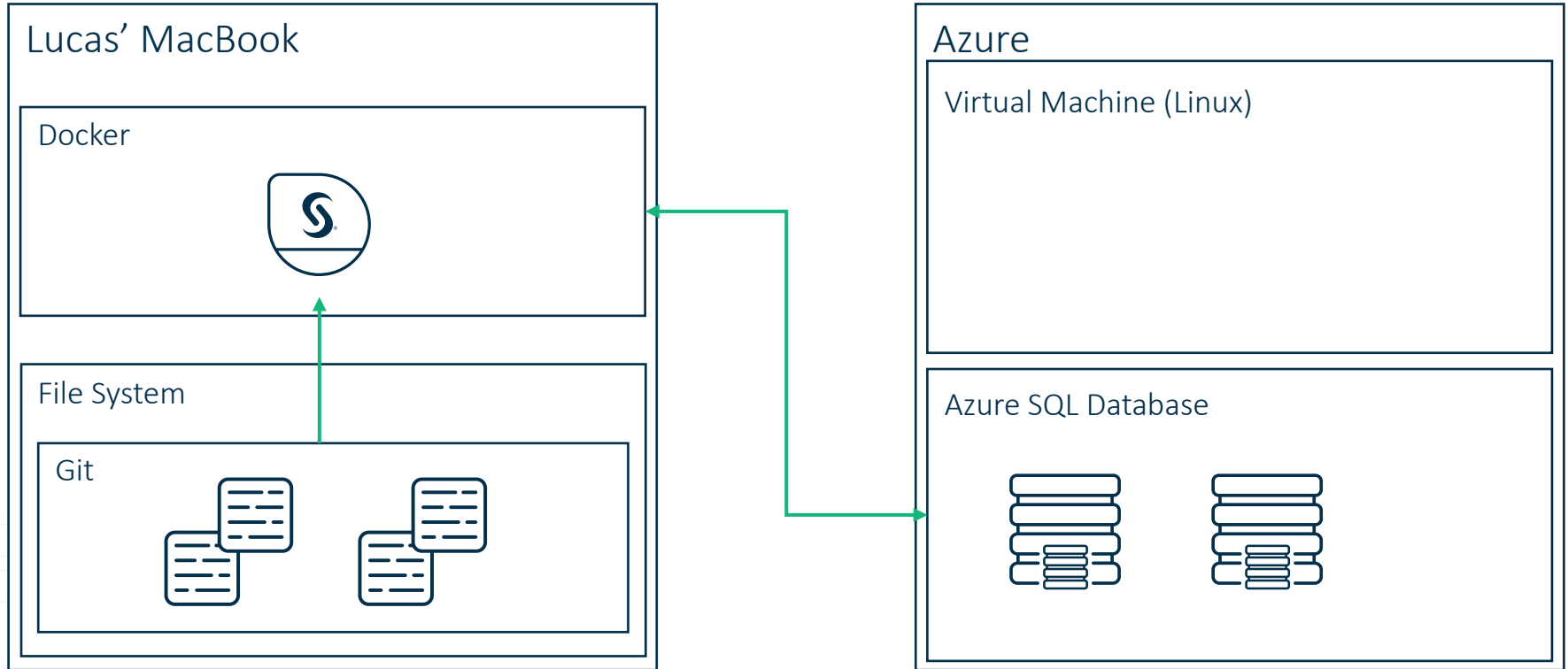
The demonstration



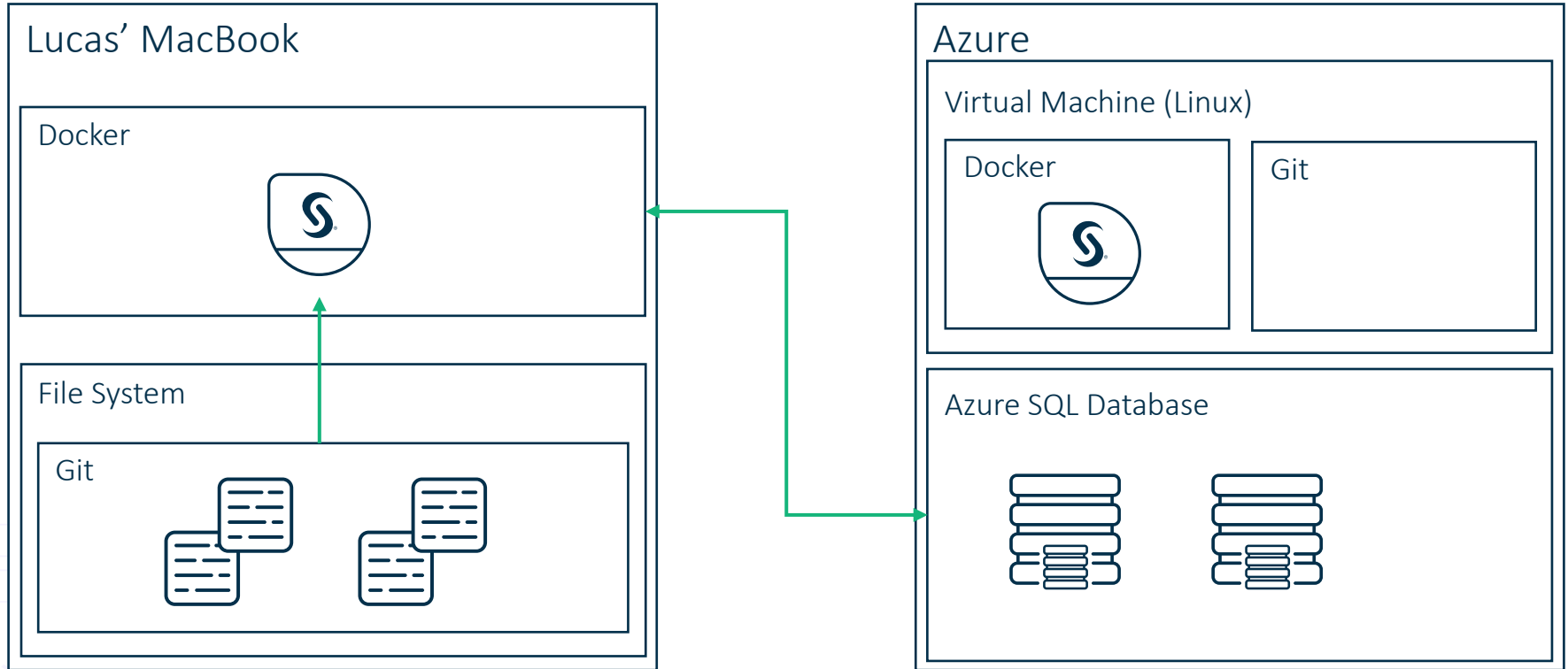
The demonstration



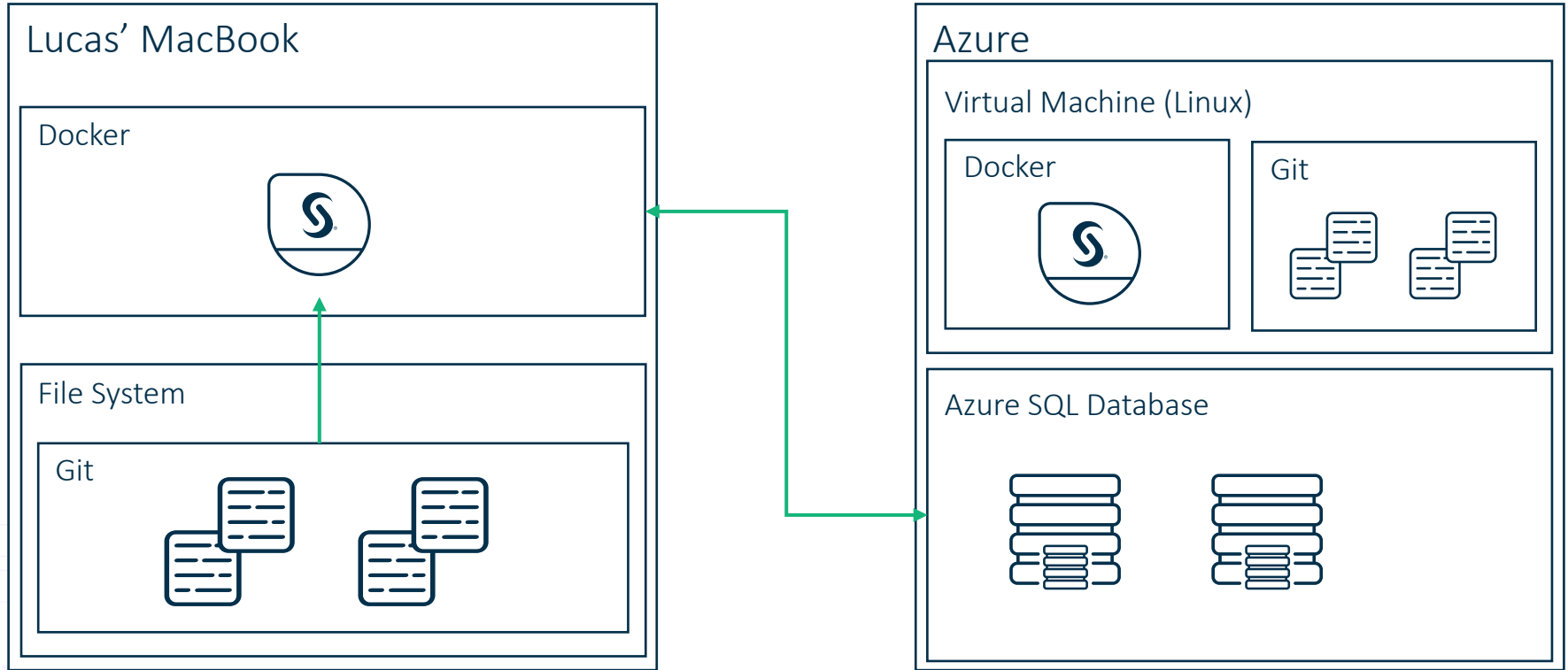
The demonstration



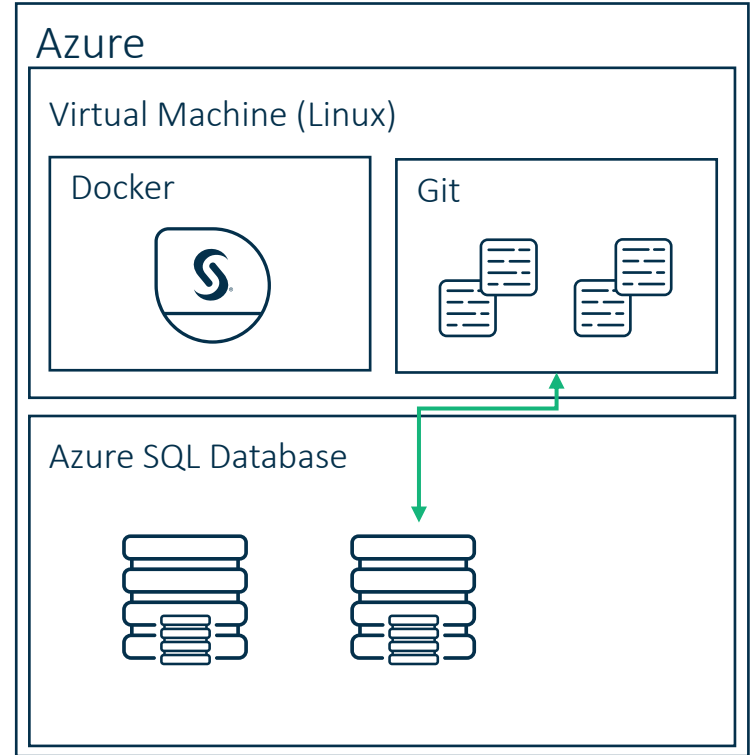
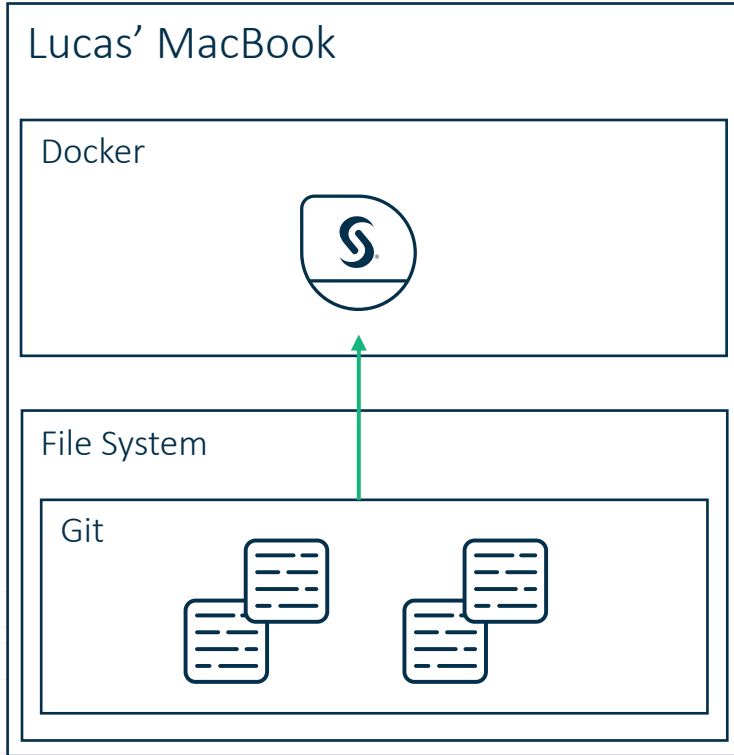
The demonstration



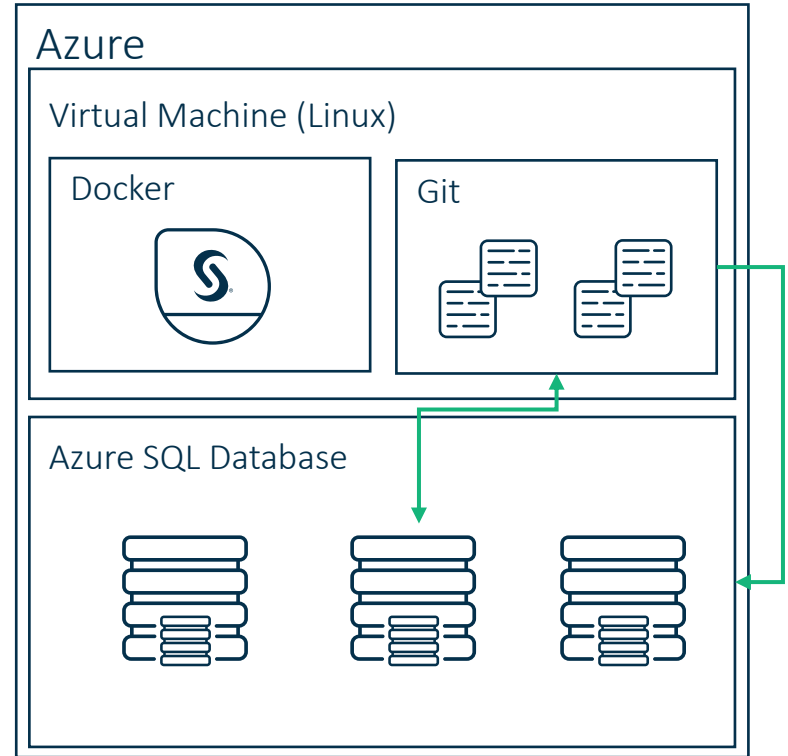
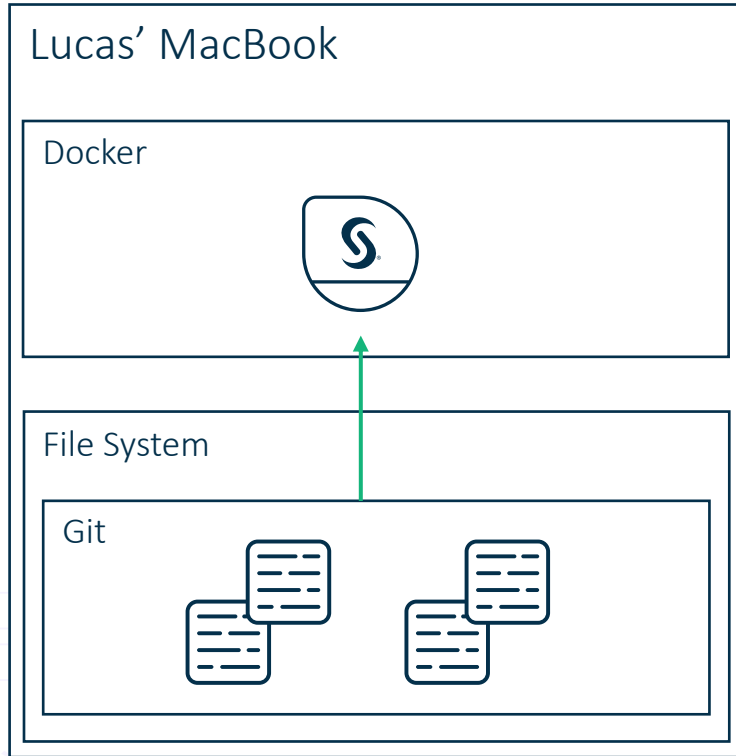
The demonstration



The demonstration



The demonstration



Demonstration

Q&A