Passing the AZ-204 Azure developer certification the hard way
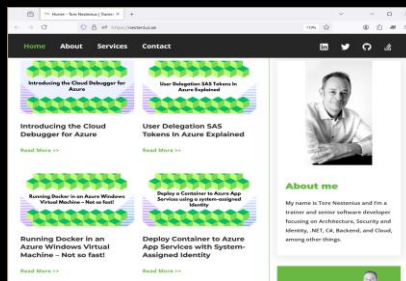
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MVP
Microsoft®
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Professional

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About Tore Nestenius

Work: tn-data.se

Blog: nestenius.se

meetup.com/net-skane

https://nestenius.se

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Based on my experience with AZ-204 in 2024

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The Goal

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Why get a certification?

✅ Validate your knowledge & build confidence

✅ Master Azure development fundamentals

✅ Stay relevant in a cloud-first market

✅ Improve CV & job opportunities

What certifications exists?

All Azure Certifications

	Infrastructure	Data and AI		Digital app and innovation	Modern work	Business applications			Security
Fundamentals Master the basics	Azure Fundamentals AZ-900	Azure AI Fundamentals AI-900	Azure Data Fundamentals DP-900		Microsoft 365 Fundamentals MS-900	Dynamics 365 Fundamentals (CRM) MB-910	Dynamics 365 Fundamentals (ERP) MB-920	Power Platform Fundamentals PL-900	Security, Compliance, and Identity Fundamentals SC-900
Role-based Expand your technical skill set	Azure Administrator Associate AZ-104	Azure AI Engineer Associate AI-102	Power BI Data Analyst Associate PL-300	Azure Developer Associate AZ-204	Endpoint Administrator Associate MD-102	Dynamics 365 Customer Service Functional Consultant Associate MB-230	Dynamics 365 Supply Chain Management Functional Consultant Associate MB-330	Power Platform Functional Consultant Associate PL-200	Azure Security Engineer Associate AZ-500
	Azure Solutions Architect Expert AZ-305	Azure Data Scientist Associate DP-100	Azure Data Engineer Associate DP-203	DevOps Engineer Expert AZ-400	Administrator Expert MS-102	Dynamics 365 Finance and Operations Apps Solution Architect Expert MB-700	Dynamics 365 Supply Chain Management Functional Consultant Expert MB-335	Power Platform Developer Associate PL-400	Cybersecurity Architect Expert SC-100
	Azure Network Engineer Associate AZ-700	Azure Database Administrator Associate DP-300	Fabric Analytics Engineer Associate DP-600		Collaboration Communications Systems Engineer Associate MS-721	Dynamics 365 Field Service Functional Consultant Associate MB-240	Dynamics 365 Finance and Operations Apps Developer Associate MB-500	Power Automate RPA Developer Associate PL-500	Security Operations Analyst Associate SC-200
	Windows Server Hybrid Administrator Associate AZ-800 AZ-801		Fabric Data Engineer Associate DP-700		Teams Administrator Associate MS-700	Dynamics 365 Customer Experience Analyst Associate MB-280	Dynamics 365 Business Central Functional Consultant Associate MB-800	Power Platform Solution Architect Expert PL-600	Identity and Access Administrator Associate SC-300
						Dynamics 365 Finance Functional Consultant Associate MB-310	Dynamics 365 Business Central Developer Associate MB-820		Information Protection and Compliance Administrator Associate SC-400

Which are most relevant for developers?

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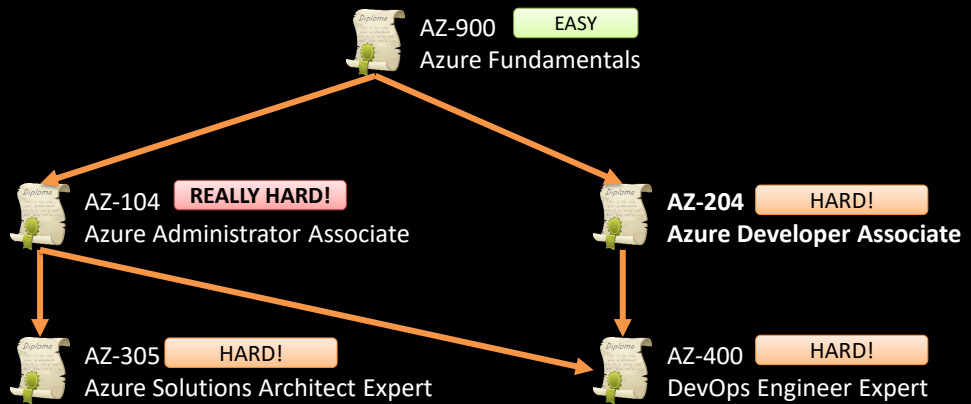## Certifications for Developers

Relevant certifications for developers

AZ-900 (Optional)
Azure Fundamentals

AZ-104
Azure Administrator Associate

AZ-204
Azure Developer Associate

AZ-305
Azure Solutions Architect Expert

AZ-400
DevOps Engineer Expert
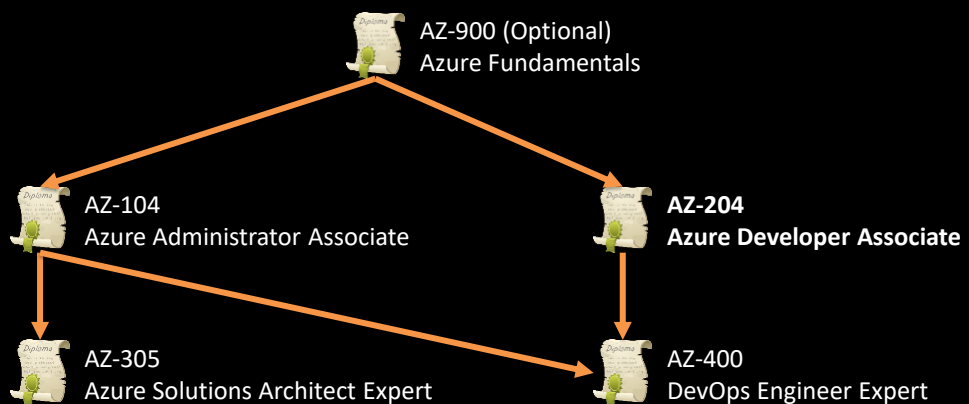
What is the difficulty like?

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Certifications for Developers

Estimated difficult level

AZ-900 `EASY`
Azure Fundamentals

AZ-104 `REALLY HARD!`
Azure Administrator Associate

AZ-204 `HARD!`
Azure Developer Associate

AZ-305 `HARD!`
Azure Solutions Architect Expert

AZ-400 `HARD!`
DevOps Engineer Expert

What else is good to know?

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Open-Book Exam

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You can access MS Learn during the certification

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Microsoft Learn vs. In-Person Training

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MS-Learn online is very similar to the classroom training

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Practice Questions

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Practice Questions

There are plenty of practice questions online

A company uses Azure API Management to expose some of its services.

Each developer consuming APIs must use a single key to obtain access to various APIs without requiring approval from the API publisher.

You need to recommend a solution.

Which solution should you recommend?

- ○ Define a subscription with all APIs scope.
- ○ Define a subscription with product scope.
- ○ Restrict access based on caller IPs.
- ○ Restrict APIs based on client certificate.

Next >   **Check Your Answer**

Example Sources:
- Microsoft Learn
- www.whizlabs.com
- tutorialsdojo.com
- www.measureup.com
- www.examtopics.com

Some tests are a bit outdated!

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The Change Log

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The certification scope changes from time to time

Skill area prior to July 21, 2025	Skill area as of July 21, 2025	Change
Audience profile		Minor
Develop Azure compute solutions	Develop Azure compute solutions	No % change
Implement containerized solutions	Implement containerized solutions	Minor
Implement Azure security	Implement Azure security	No % change
Implement secure Azure solutions	Implement secure Azure solutions	Minor
Connect to and consume Azure services and third-party services	Connect to and consume Azure services and third-party services	No % change
Implement API Management	Implement Azure API Management	Minor
Develop event-based solutions	Develop event-based solutions	Minor

Virtual Machines were removed a few years ago.

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Certification Communities

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Certification Communities

r/AzureCertification on Reddit

https://www.reddit.com/r/AzureCertification/

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AZ-900 Azure Fundamentals

20
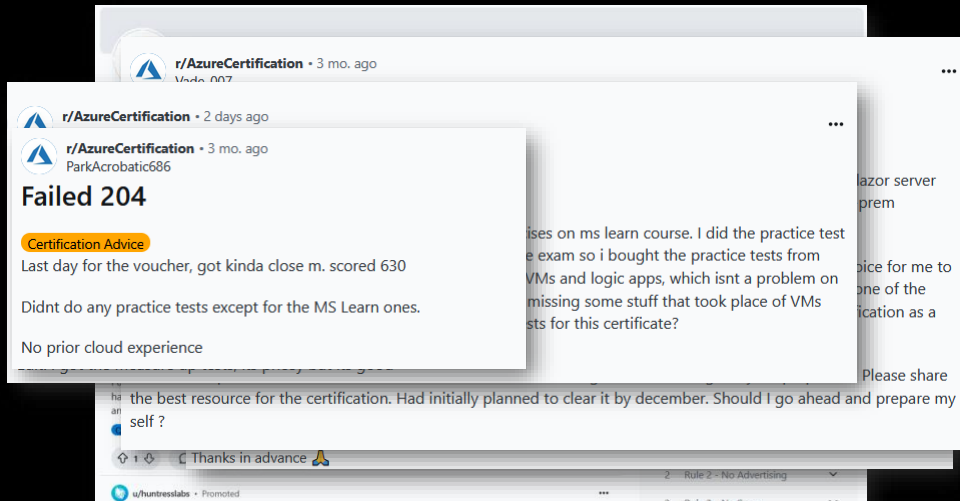
Getting the **AZ-900** is a good starting point

AZ-900
- Fairly easy
- Get the fundamentals of Azure
- Get familiar with:
  - How to study
  - MS-Learn
  - The certification process

What good study materials exist?

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Two good resources to pass this certification:

Microsoft Learn

John Savill

COURSE
Microsoft Azure Fundamentals

Continue course >

Training in this course

Microsoft Azure Fundamentals: Describe cloud concepts
52 min • Learning Path • 3 units

Microsoft Azure Fundamentals: Describe Azure architecture and services
3 hr 25 min • Learning Path • 4 units

Microsoft Azure Fundamentals: Describe Azure management and governance
1 hr 52 min • Learning Path • 4 units

⊕ Add

+

AZ-900 Azure Fundamentals ...

från John Savill's Technical Training

Spellista • 65 videor • 3 281 369 visningar

This is my playlist for the full 9 hours of AZ-900 Azure
Fundamentals Certification Course. Updated for ... ...mer

▶ Spela upp alla

- 65 Videos
- 9h long!

This is enough to pass the certification!

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AZ-204 Azure Developer Associate

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AZ-204 Azure Developer Associate

AZ-204 focuses on:

☑ Cloud application development

☑ Containerization and deployment

☑ Authentication and Authorization

☑ Service integration (Storage, Queues...)

Where to start the journey?

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AZ-204 Azure Developer Associate

The two main resources I used:

AZ-204 - by Scott Duffy (Udemy)

8 hours long!

AZ-204 Developing Solutions for Microsoft Azure - SEP 2024

The most complete course available on the Microsoft Azure developer exam AZ-204 with timed practice test.

Bestseller 4.5 ★★★★½ (28,996 ratings) 157,147 students

Created by Scott Duffy • 1,000,000+ Students, Software Architect.ca

🛈 Last updated 2024-09
🌐 English
💬 English [CC], Bulgarian [Auto], 24 more

Microsoft Learn

COURSE
Developing Solutions for Microsoft Azure

Continue course >

Training in this course

AZ-204: Implement Azure App Service web apps
🕐 2 hr 3 min • Learning Path • 4 units

AZ-204: Implement Azure Functions
🕐 53 min • Learning Path • 2 units

AZ-204: Develop solutions that use Blob storage
🕐 1 hr 19 min • Learning Path • 3 units

AZ-204: Develop solutions that use Azure Cosmos DB
🕐 1 hr 19 min • Learning Path • 2 units

AZ-204: Implement containerized solutions
🕐 1 hr 42 min • Learning Path • 3 units

Is this enough to pass?

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Is this enough to pass?

No, the test is harder than what's covered in MS-Learn!

Scott Duffy Course

MS Learn

The Exam

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Studying for AZ-204 the hard way!

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LogoutPath

Azure SDKs API Gateway Content Delivery Network (CDN) Consistency Models (Strong, Eventual) OAuth Authorization Server Deployment Slots (App Service) Quotas and Throttling Azure App Service Application Insights Retry Pattern GitHub Actions IPsec A/B Testing Data Encr...

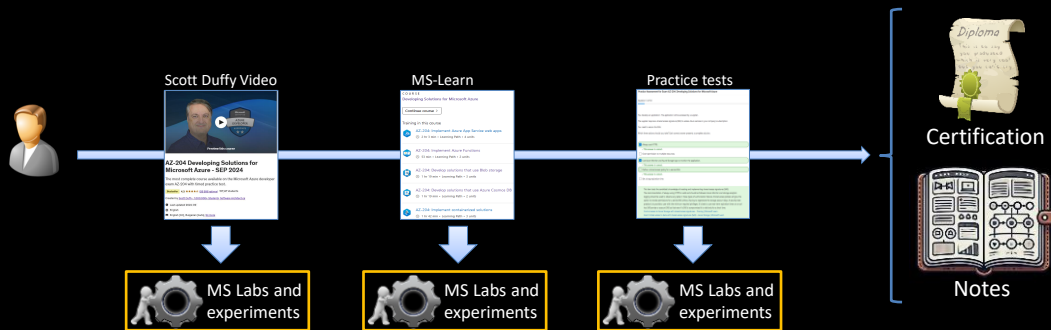**How are we going to learn all of this?**

...sage Brokers Log Analytics Role-Based A...cs and Alerts Azure Repos Azure DevOps Pipelines Service Principals Azure Kubernetes Service (AKS) Azure Portal SOAP Caching (Redis Cache) Application Insights Managed Identity Automatic Failover Groups Azure PowerShell Dependency Injection Azure Data Lake Storage Azure Event Grid JWT (JSON Web Token) CQRS (Command Query Responsibility Segregation) Diagnostic Settings Database Sharding Secrets Management Deployment Stages Continuous Deployment (CD) Continuous Integration (CI) Middleware Build Agents Visual Studio Code Serverless Computing Software as a Service (SaaS) Identity and Access Management (IAM) Azure File Storage Dead-letter Queue (DLQ) NoSQL Databases Circuit Breaker Pattern Shared Access Signature (SAS) Queue and Message TTL (Time-to-Live) Azure DevOps Sharding Autoscale Azure Boards Pub/Sub Pattern Distributed Tracing Azure Functions Azure Monitor OpenAPI/Swagger Data Replication (LRS, ZRS, GRS, RA-GRS) Azure Resource Manager (ARM) Azure Functions Core Tools Canary Release Azure Regions and Availability Zones REST API Azure Table Storage Partition Key Azure Blob Storage Azure Storage Explorer Azure Artifacts External Identity Providers Distributed Tracing Rollback Strategy Microservices Architecture Stateless and Stateful Services Azure Database for PostgreSQL Azure Database for MySQL API Versioning WebSockets Resource Throttling Azure Service Health Azure Cosmos DB Azure Relay Platform as a Service (PaaS) HTTP/HTTPS Rate Limiting Azure Key Vault TCP/IP Azure Notification Hubs OData SQL Elastic Pools Azure API Management Queue Storage Durable Functions Geo-replication Multi-Factor Authentication (MFA) Azure SignalR Service Azure Container Instances (ACI) Resource Groups Azure Logic Apps Retry Policies Azure SQL Managed Instance Policies (XML-based policy configuration) Blue-Green Deployme...

What are our options?

...ption API Gateway Pattern OAuth 2.0 Azure Monitor Logs Hot, Cool, and A...ervice Bus Serverless Orchestration Managed Identity Authentication App Service Plan Azure Function Triggers and Bindings Connection Strings Continuous Monitoring Access Tokens Service Endpoint Policy-Based Authorization ARM Template Deployment Mode Blob Storage...

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We could do it the usual way:

Scott Duffy Video

MS-Learn

Practice tests

Certification

MS Labs and experiments

MS Labs and experiments

MS Labs and experiments

Notes

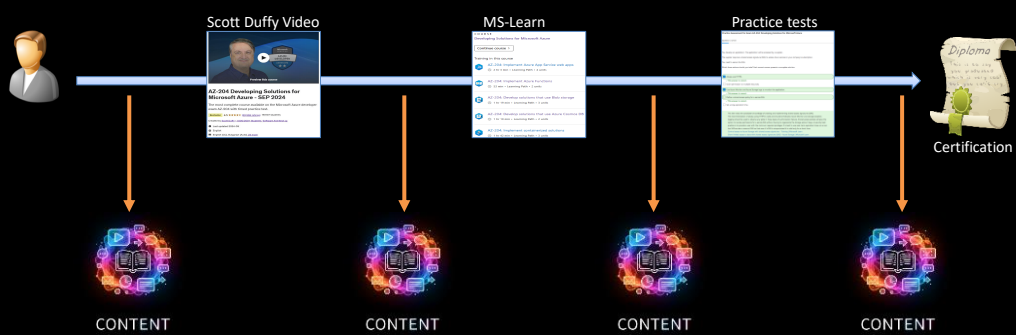## How did I do it?

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My Philosophy for Learning

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My Philosophy for Learning

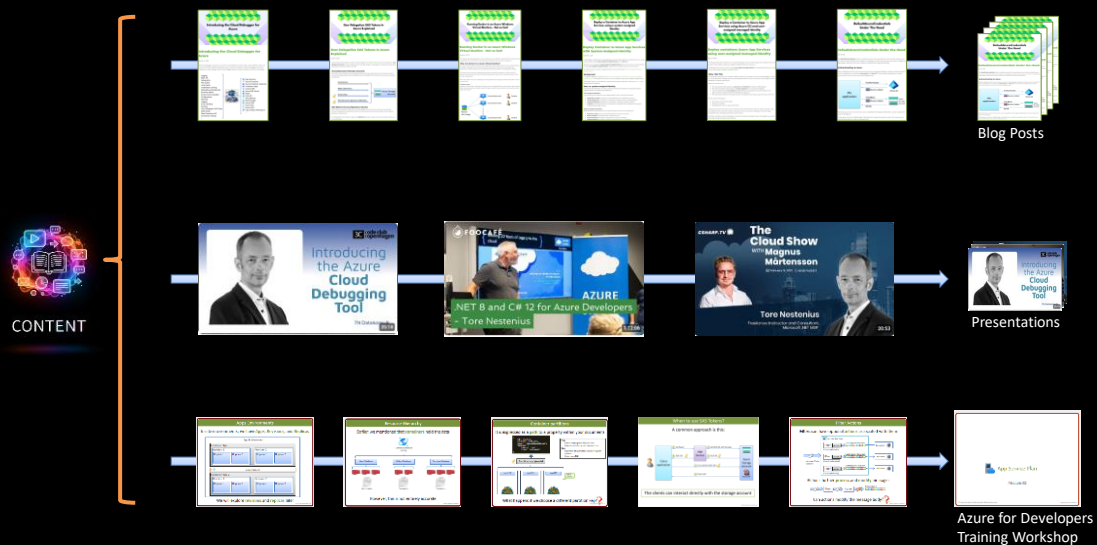# You don't really understand it until you can explain it!

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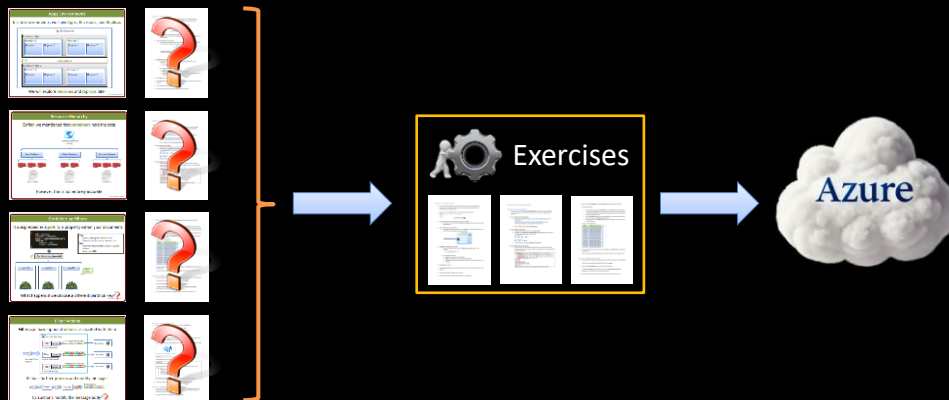
My Study Process

What content did I create?

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My Study Process

Blog Posts

Presentations

Azure for Developers Training Workshop

Just one small problem!

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My Study Process

I needed to create realistic exercises

Exercises

Azure

How did I solve this?
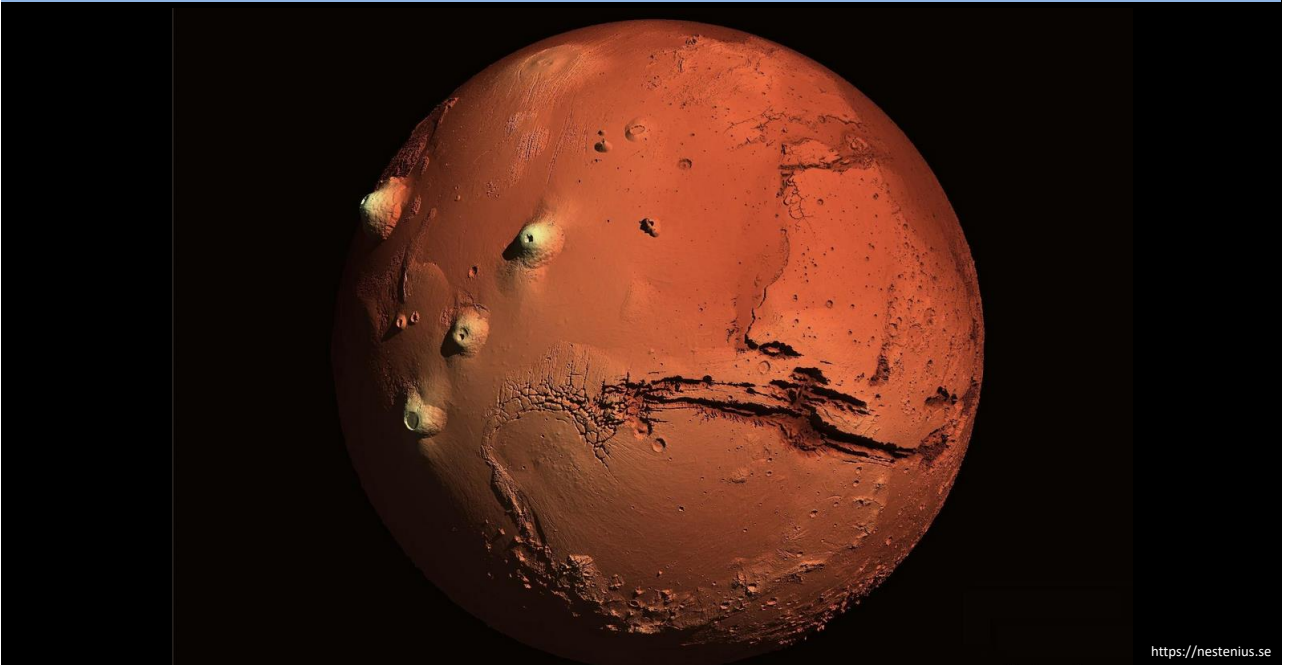
https://nestenius.se

The Project

https://nestenius.se

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The Project

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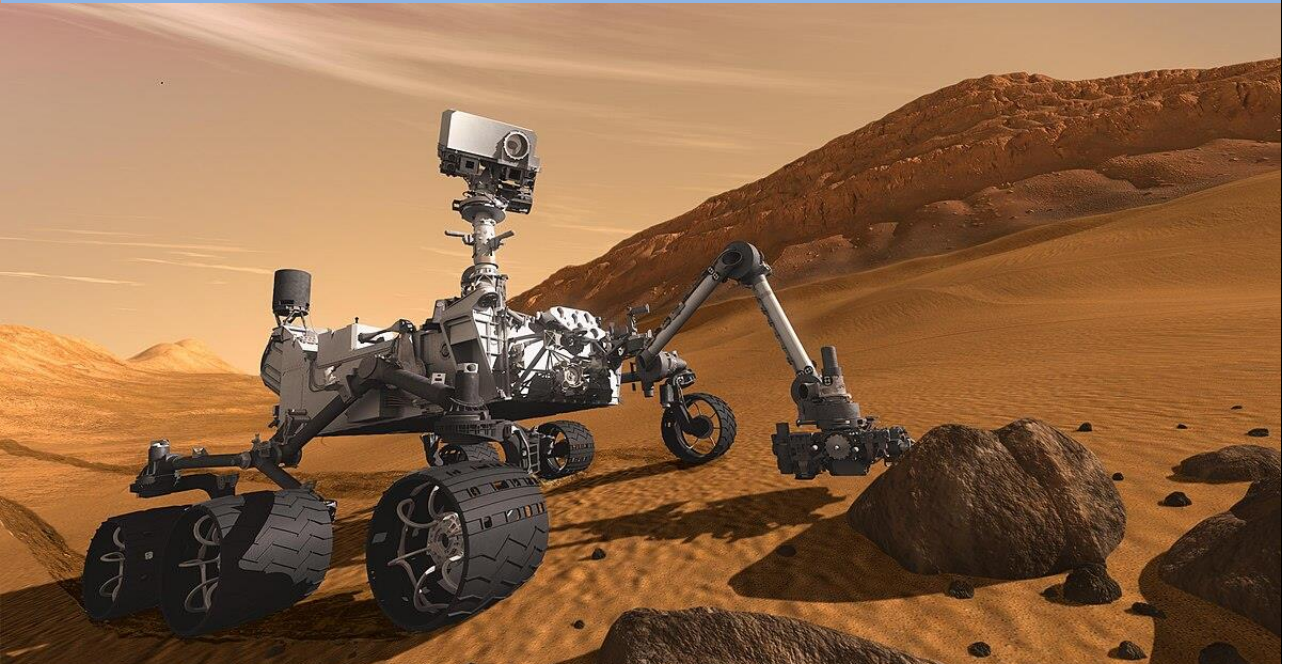
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Introducing the Cloud Debugger

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Introducing the Cloud Debugger

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What can it do?

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Cloud Debugger

Caching
Calling APIs
Configuration
Connection Strings
Credentials caching
Data Protection API
DefaultAzureCredentials
Environment variables
Error handling
File system
Local cache
Logging
Logging
Network
REST API
Runtime details
User Delegation SAS Token
Web Hooks
…

App Services
Azure Functions
Azure Container Instances
Container Apps
Redis
Entra ID
API Management services
Blob Storage
Azure CDN
Event Hub
Event Grid
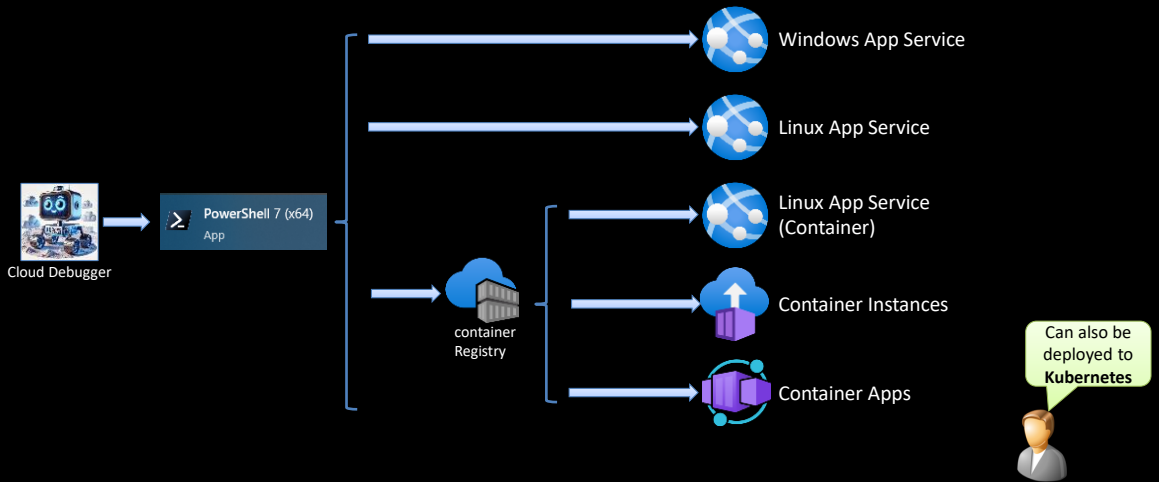Log analytics Workspace
…

+30 tools
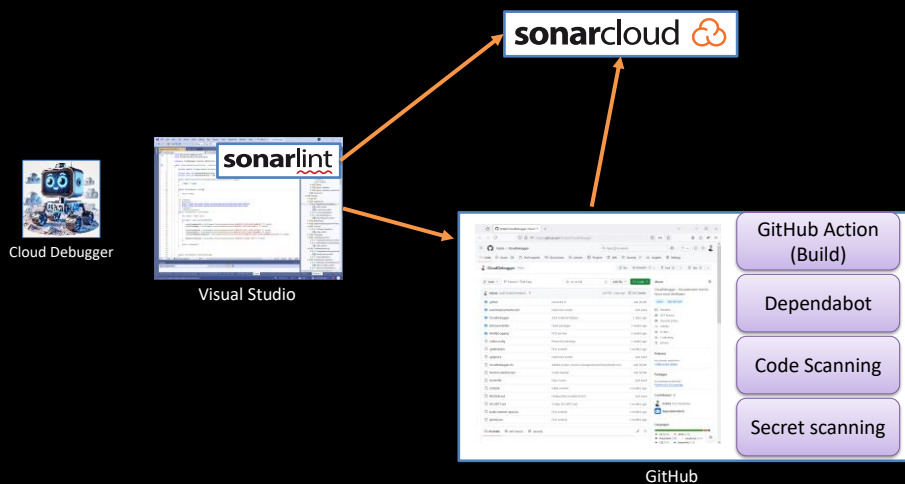
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Cloud Debugger

Deployment Options

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LogoutPath

Secure Development Practices

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Call to Action

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Call to Action

- ✅ Explore the Cloud Debugger Project
- ✅ Contribute to the project
- ✅ Teach and mentor others
- ✅ Get the certification
- ✅ Have fun!

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The End

QUESTIONS?

Project: **github.com/tndata/CloudDebugger**

Presentation: **github.com/tndataab/PublicBlogContent**

Blog: **nestenius.se**   Training: **tn-data.se**s

https://nestenius.se

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