CONTENTS

Cabinet Office

Ben Vandersteen
Technical Architect
Government Digital Service
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What is Technical Architecture?

Today’s goals:

- Understand the different types of architects
- Understand GDS the specific role
- A bit about career pathway
- My own thoughts

Types of Architect

Enterprise Architect

Solutions Architect

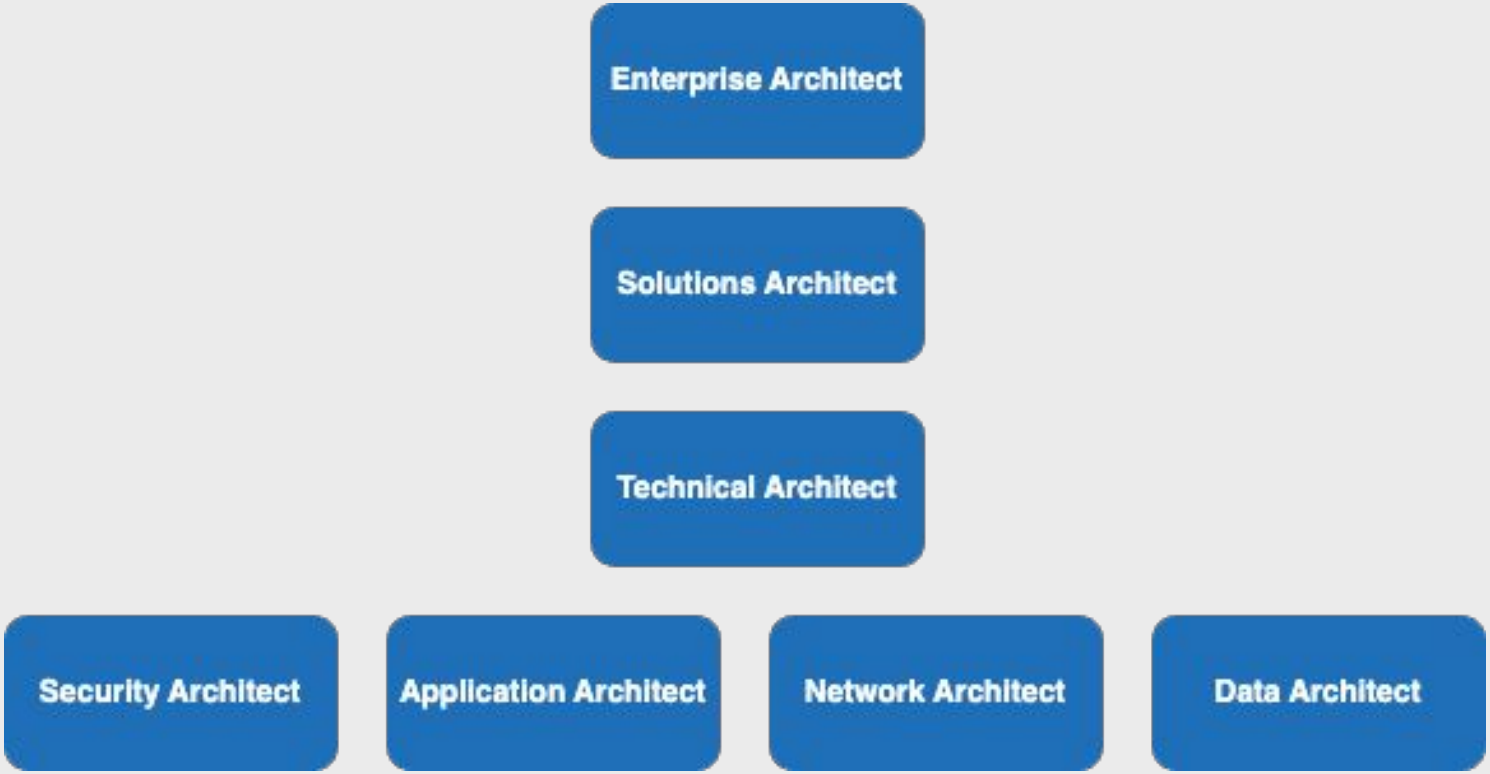
Technical Architect

Application Architect

Data Architect

Network Architect

Security Architect


Enterprise Architect
Solutions Architect
Technical Architect
Security Architect
Application Architect
Network Architect
Data Architect

The GDS Architect


Lead Architect
Architect

Gregor Hohpe · 2nd

IT Strategist firmly entrenched in the cloud engine room. Author, Speaker, former Singapore Smart Nation Fellow

Talks about #itstrategy, #cloudcomputing, #ittransformation, and #enterprisearchitecture

Singapore · Contact info

28,697 followers · 500+ connections

Kevin Littlejohn is a mutual connection

+ Follow | Message | More

Amazon Web Services (AWS)

Stanford University

People who follow Gregor also follow

See all

Ben, explore job
Services (AWS) t

See

People you may

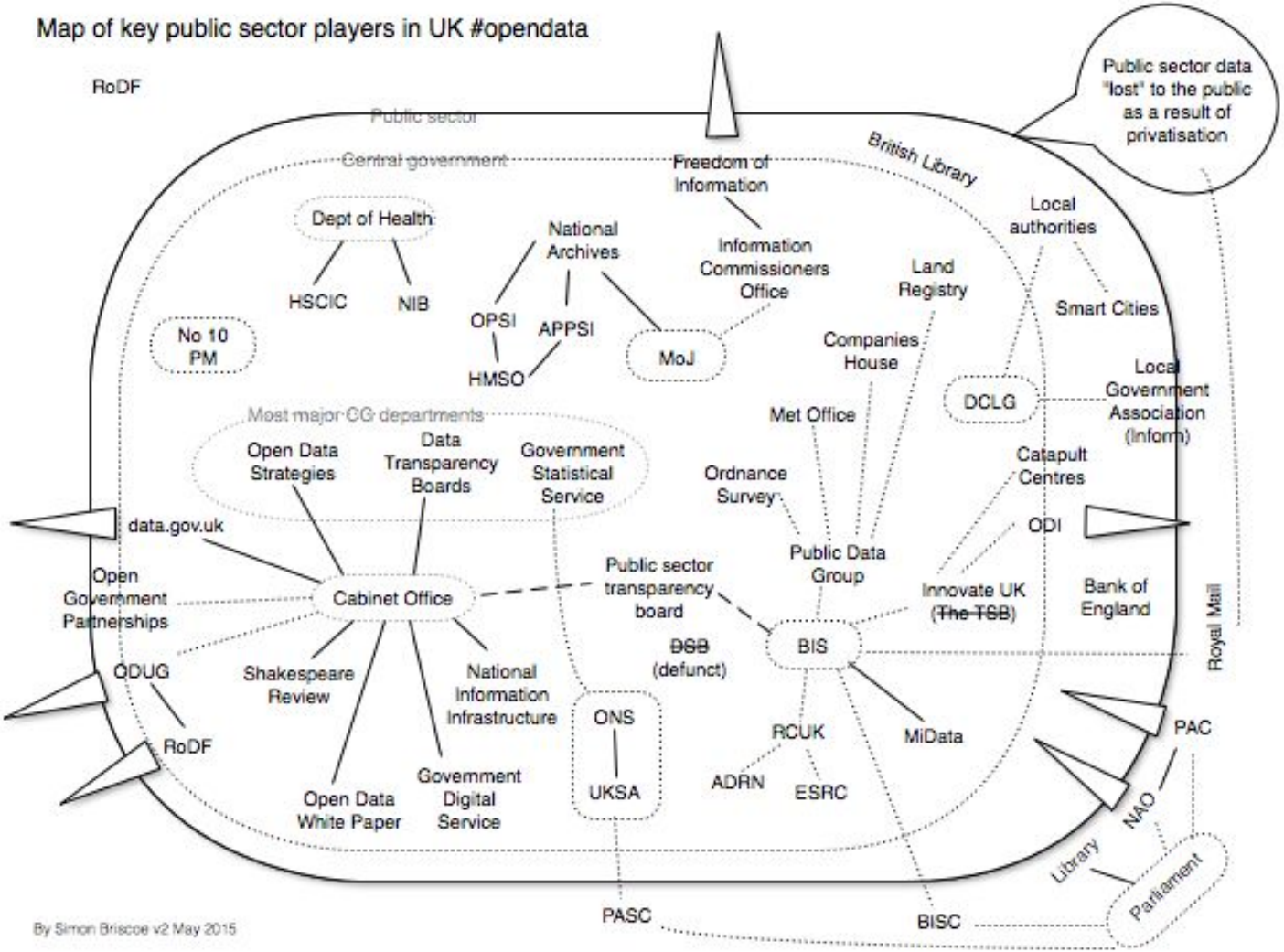
Mateus
Malaws
Technolo

Co

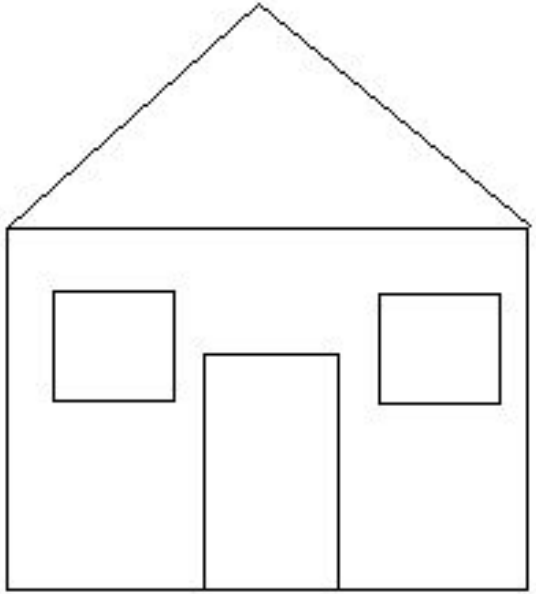
Caroline
Senior C
Governm

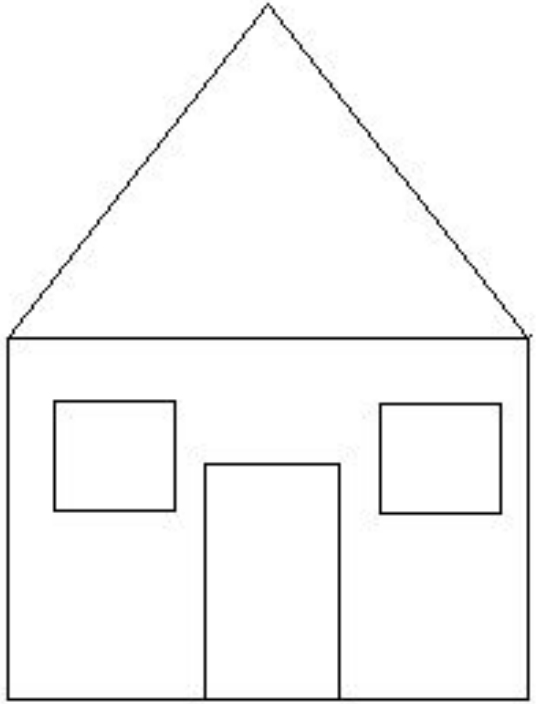
Co

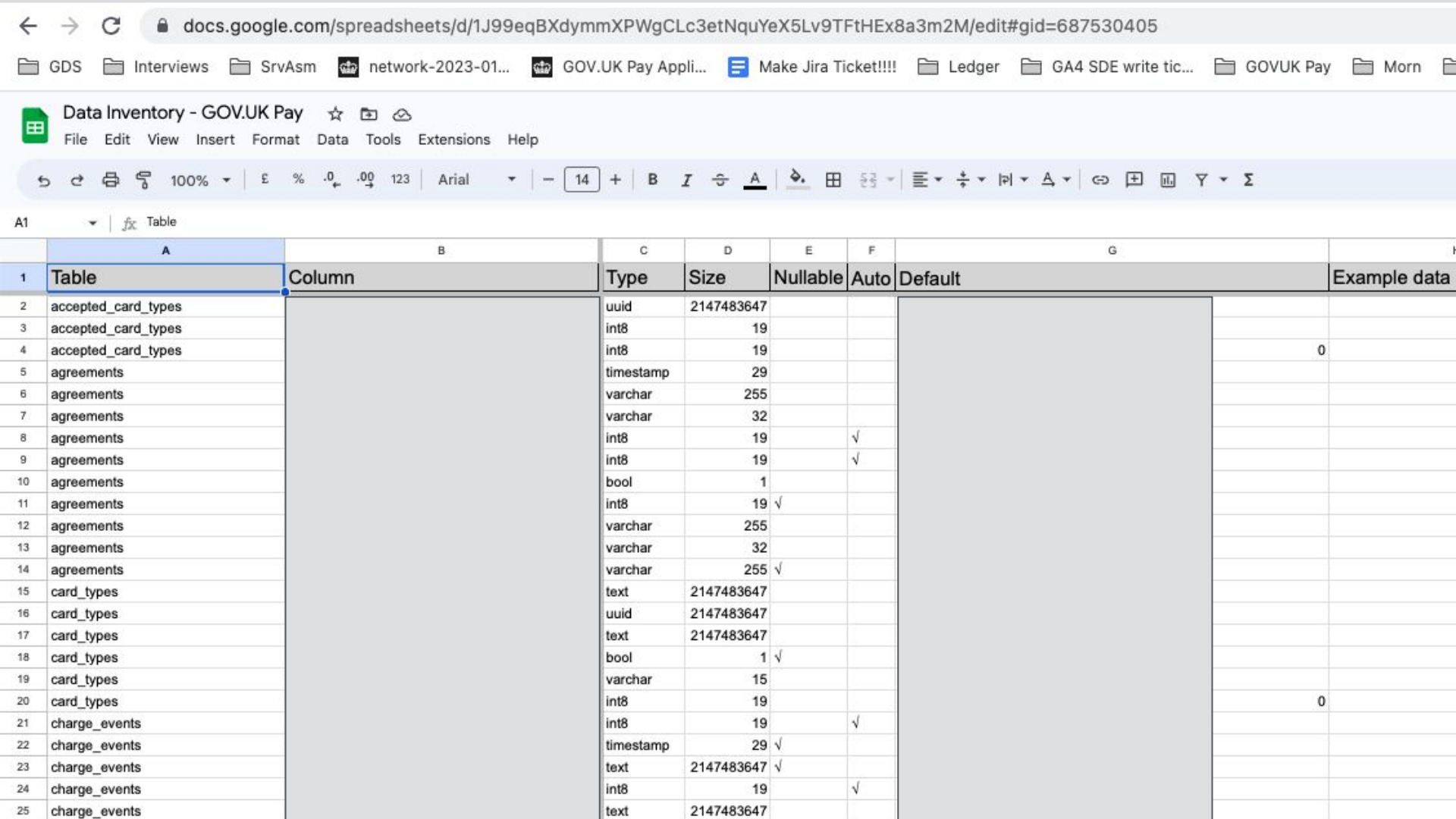
Map of key public sector players in UK #opendata



By Simon Briscoe v2 May 2015







docs.google.com/spreadsheets/d/1J99eqBXdymmXPWgCLc3etNquYeX5Lv9TFtHEx8a3m2M/edit#gid=687530405

GDS | Interviews | SrvAsm | network-2023-01... | GOV.UK Pay Appli... | Make Jira Ticket!!!! | Ledger | GA4 SDE write tic... | GOVUK Pay | Morn

Data Inventory - GOV.UK Pay

File Edit View Insert Format Data Tools Extensions Help

100% £ % .0 .00 123 Arial 14 B I S A

A1 | Table

	A	B	C	D	E	F	G	Example data
1	Table	Column	Type	Size	Nullable	Auto	Default	
2	accepted_card_types		uuid	2147483647				
3	accepted_card_types		int8	19				
4	accepted_card_types		int8	19			0	
5	agreements		timestamp	29				
6	agreements		varchar	255				
7	agreements		varchar	32				
8	agreements		int8	19		√		
9	agreements		int8	19		√		
10	agreements		bool	1				
11	agreements		int8	19	√			
12	agreements		varchar	255				
13	agreements		varchar	32				
14	agreements		varchar	255	√			
15	card_types		text	2147483647				
16	card_types		uuid	2147483647				
17	card_types		text	2147483647				
18	card_types		bool	1	√			
19	card_types		varchar	15				
20	card_types		int8	19			0	
21	charge_events		int8	19		√		
22	charge_events		timestamp	29	√			
23	charge_events		text	2147483647	√			
24	charge_events		int8	19		√		
25	charge_events		text	2147483647				

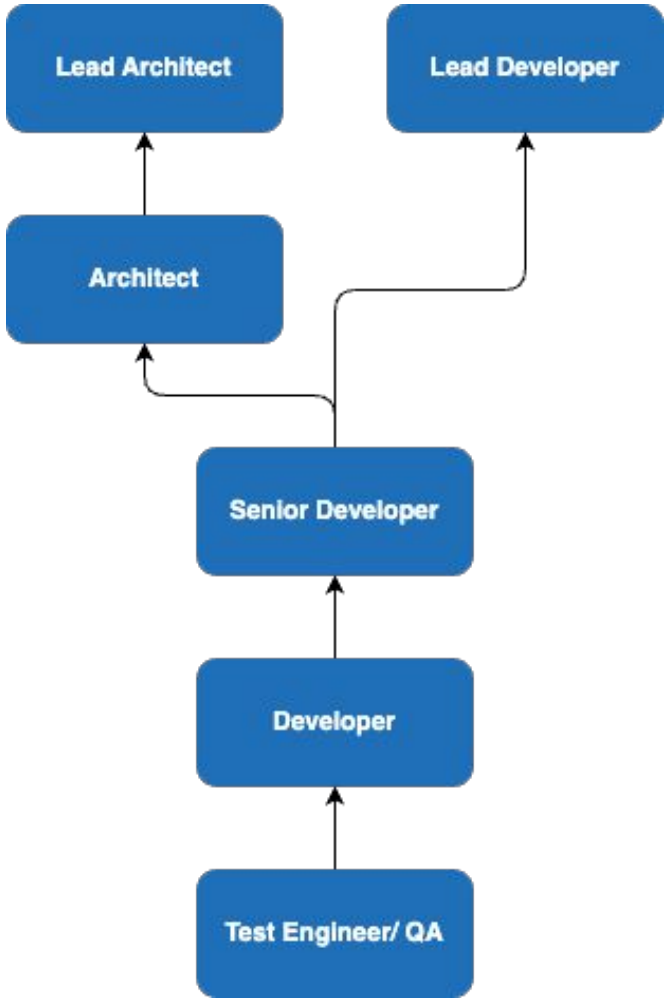
Copy of Cloud Comparison (1st and 2nd round quotes)

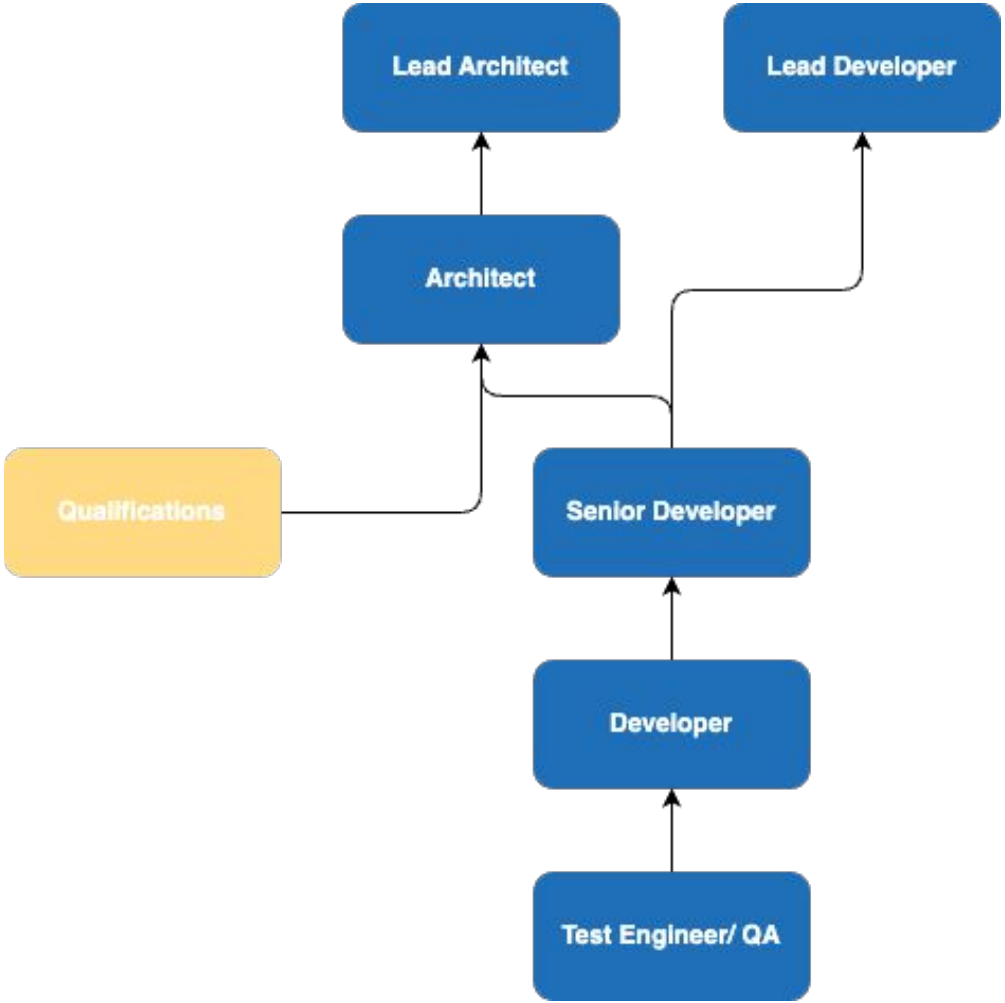
File Edit View Insert Format Data Tools Extensions Help

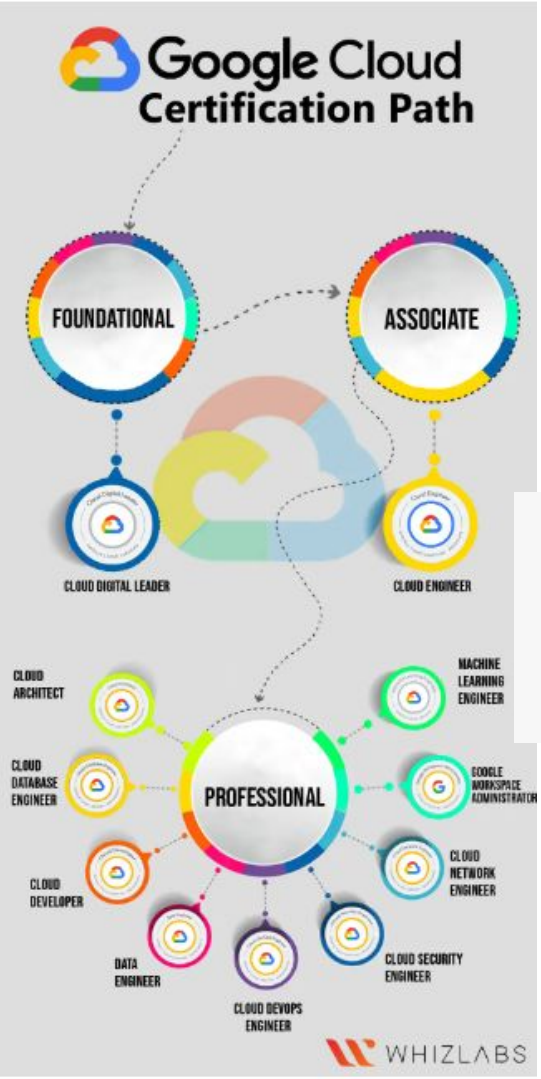
A1 | Provider

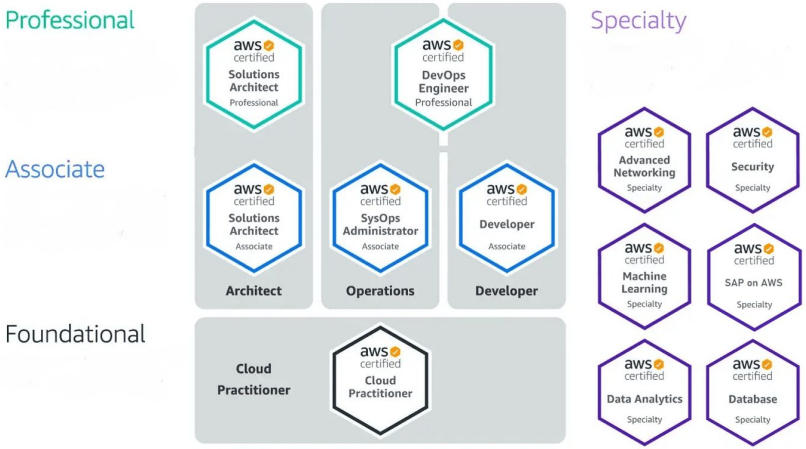
	A	B	C	D	E	F	G
1	Provider	Service	Type*	Configuration	Qty	Unit Price	Total
2							
3	Digital Ocean	2nd round quote					
4	Digital Ocean	Service	Type*	Configuration	Qty	Unit Price	Total
5	Digital Ocean	Server	Basic (Kubernetes Egress- one for each env	s-1vcpu-1gb	2		
6	Digital Ocean	Server	General (Production Env)	g-4vcpu-16gb	5		
7	Digital Ocean	Server	General (Test Env)	g-4vcpu-16gb	3		
8	Digital Ocean	Load Balancer	Load Balancer	Horizontally Sca	3		
9	Digital Ocean	DB	Managed Postgres	8vcpu 64ram 1.7	1		
10	Digital Ocean	DB	Managed Postgres	2vcpu 16ram 0.4	1		
11	Digital Ocean	Block Storage V	Spaces Subscription (250GB included)	* 1TB outbound	1		
12	Digital Ocean	Block Storage V	Spaces (production env) - storage	(was 1750)	0		
13	Digital Ocean	Block Storage V	Spaces (test env) - storage	(was 1000)	0		
14	Digital Ocean	Block Storage V	Container Registry**	Professional (10	1		
15	Digital Ocean	Bandwidth in GE	Of which allowance (prodcution)	5000	5		
16	Digital Ocean	Bandwidth in GE	Of which allowance (test)	5000	3		
17	Digital Ocean	Bandwidth in GE	Basic (Kubernetes Egress- one for each env	1000	2		
18	Digital Ocean	Bandwidth in GE	Overage		1		
19							
20	AWS (1y)	Amazon EKS	EKS Cluster Management	Cluster Manager	1		
21	AWS (1y)	Amazon EC2	EKS Cluster Managed Nodes (Reserved/ Sp	m5a.xlarge (989	8		
22	AWS (1y)	Application Load	EKS Loadbalancing / Ingress	ALB	2		
23	AWS (1y)	S3 Standard	Logging storage for s3	S3 Standard sto	1		
24	AWS (1y)	Data Transfer	Logging storage for s3	DT Inbound: Not	1		
25	AWS (1y)	AWS Web Applica	tion Firewall (WAF)	Representative u	1		
26	AWS (1y)	Amazon Virtual P	Site-To-Site VPN	VPN for local	1		
27	AWS (1y)	Amazon CloudW	Monitoring / CloudWatch	Logging/ alerting	1		
28	AWS (1y)	AWS Data Transfer		2TB internet req	1		
29	AWS (1y)	AWS Serverless	Aurora Postgres compatible	4acu p/h 1.5tb st	1		
30	AWS (1y)	AWS Serverless	Aurora Postgres compatible	1acu p/h 0.5tb st	1		
31							
32	Microsoft	Azure Kubernete	Azure AKS 24/7 Reserved Usage - low dem	3 D4v3 (4 vCPU	1		
33	Microsoft	Azure Kubernete	Azure AKS high-demand 8-hours per day	5 D4v3 (4 vCPU	1		

Career Pathway


Lead Architect
Lead Developer
Architect
Senior Developer
Developer
Test Engineer/ QA

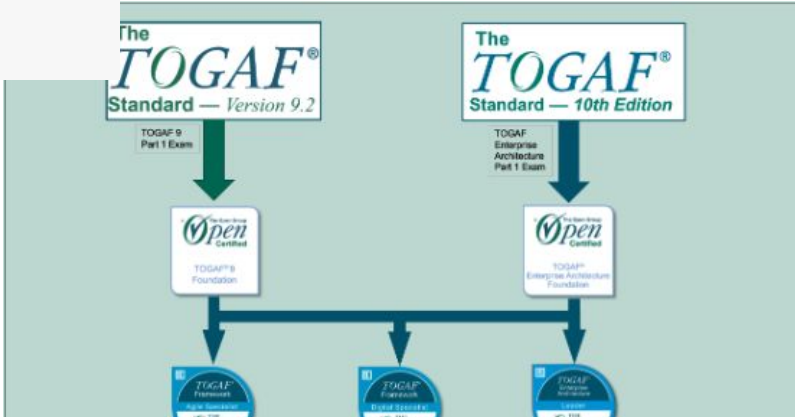

Lead Architect
Lead Developer
Architect
Qualifications
Senior Developer
Developer
Test Engineer/ QA



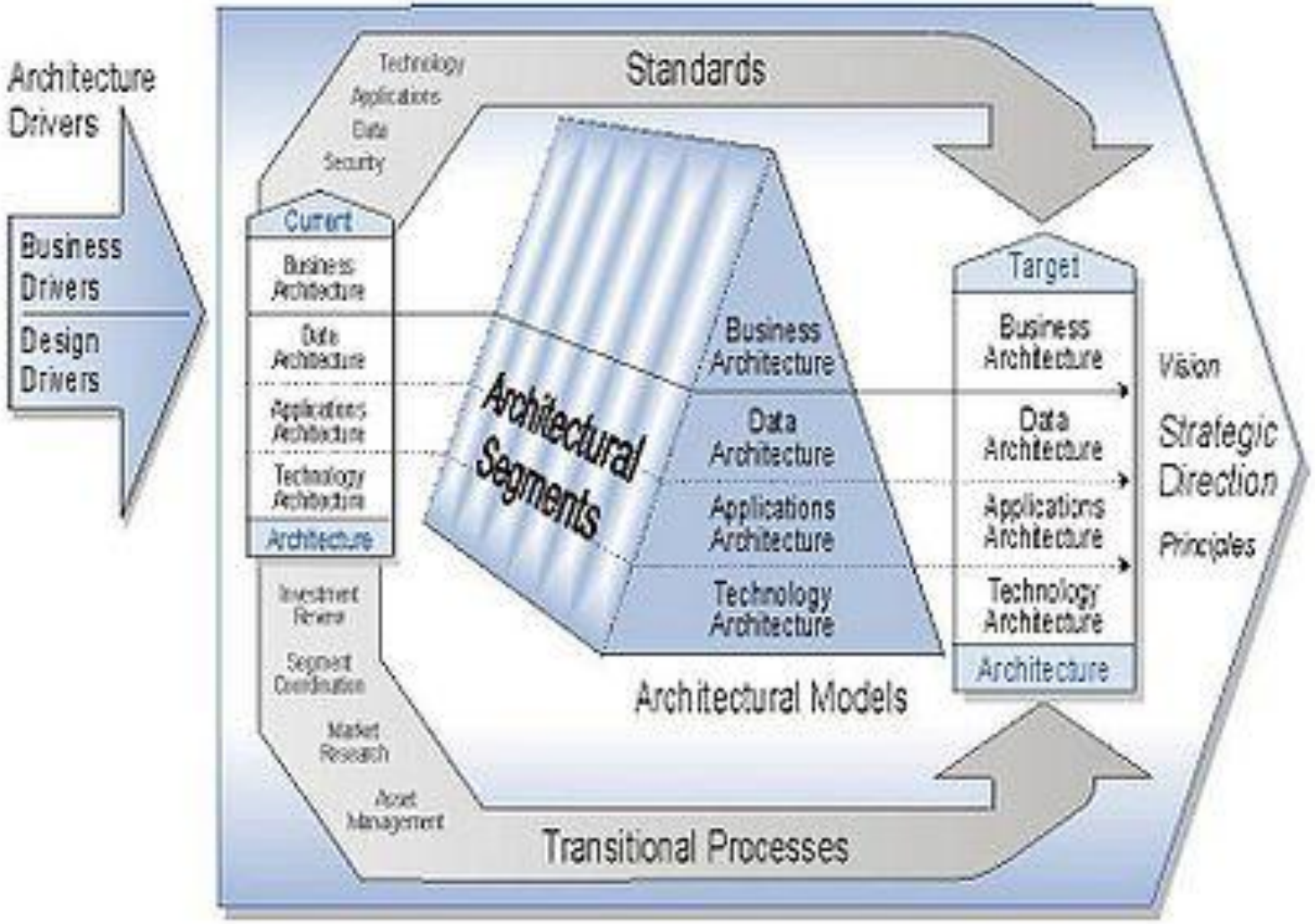


Certified Information Systems Security Professional

An (ISC)² Certification



Frameworks


Architecture Drivers
Business Drivers
Design Drivers
Technology
Applications
Data
Security
Standards
Current
Business Architecture
Data Architecture
Applications Architecture
Technology Architecture
Architecture
Architectural Segments
Business Architecture
Data Architecture
Applications Architecture
Technology Architecture
Architectural Models
Target
Business Architecture
Data Architecture
Applications Architecture
Technology Architecture
Architecture
Vision
Strategic Direction
Principles
Investment Review
Segment Coordination
Market Research
Asset Management
Transitional Processes

DoDAF DoD Architecture Framework Version 2.02
DoD Deputy Chief Information Officer

The DoDAF Architecture Framework Version 2.02

Welcome to DoDAF Version 2.02! This is the official and current version for the Department of Defense Architecture Framework.

Version 2.02, is the approved release of the DoDAF as of August 2010.

For a description of changes made to DoDAF/DM2 2.01 to create DoDAF/DM2 2.02, download the Version Description Document here.

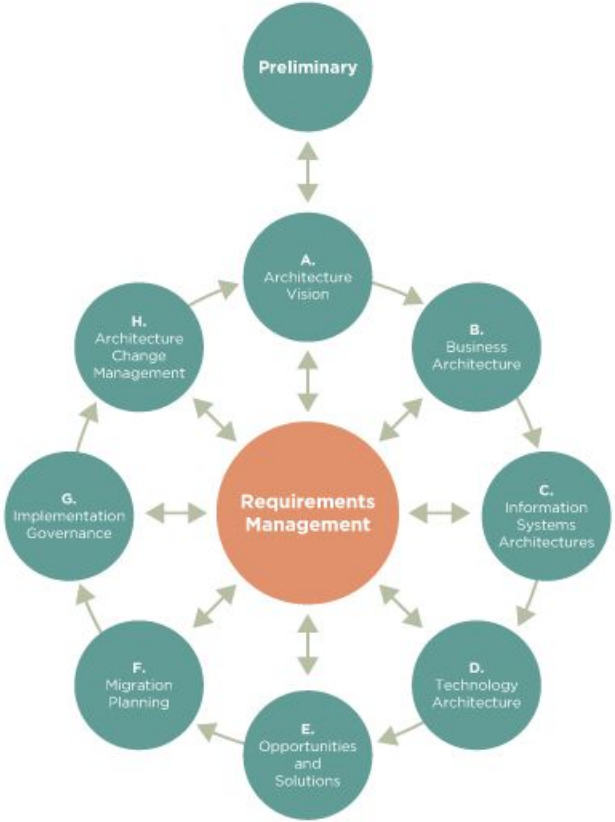
This site has been edited to remove references to the DoD Architecture Registry System (DARS) and the DoDAF Journal which are no longer supported. Existing DARS data is accessible via the Warfighting Mission Area Architecture Federation and Integration Portal WMA AFIP (CAC Required)

DoDAF Conformance

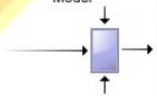
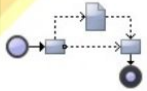
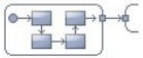
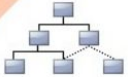
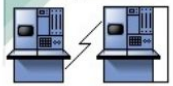
DoD Components are expected to conform to DoDAF to the maximum extent possible in development of architectures within the Department. Conformance ensures that reuse of information, architecture artifacts, models, and viewpoints can be shared with

TOGAF

Architecture Design Model



ZFI Zachman Framework

The Zachman Framework	DATA What	FUNCTION How	NETWORK Where	PEOPLE Who	TIME When	MOTIVATION Why
SCOPE (Contextual) Planner	Things Important to the Business 	Processes the Business Performs 	Locations in which the Business Operates 	Organizations Important to the Business 	Events/Cycles Significant to the Business 	Business Goals/Strategies 
BUSINESS MODEL (Conceptual) Owner	Conceptual Data Model 	Business Process Model 	Business Logistics 	Work Flow Model 	Master Schedule 	Business Plan 
SYSTEM MODEL (Logical) Designer	Logical Data Model 	Application Architecture 	Distributed System Architecture 	Human Interface Architecture 	Processing Structure 	Business Rule Model 
TECHNOLOGY MODEL (Physical) Builder	Physical Data Model 	System Design 	Technology Architecture 	Presentation Architecture 	Control Structure 	Rule Design 
DETAILED REPRESENTATIONS Sub-Contractor	Data Definition 	Program 	Network Architecture 	Security Architecture 	Timing Definition 	Rule Specification 
FUNCTIONING ENTERPRISE	Data 	Function 	Network 	Organization Units 	Schedule 	Strategy 

Guidance

MOD Architecture Framework

The MOD Architecture Framework (MODAF) is a set of rules that support defence planning and change management activities.

From: Ministry of Defence
Published 12 December 2012
Last updated 7 August 2020 — See all updates

This guidance was withdrawn on 15 January 2021

MODAF has been replaced with the NATO Architecture Framework (NAF) V4.

NAF V4 can be found on the NATO website.

Contents

Related content

Machine learning with limited data
It Takes Two to Entangle - a Dstl biscuit book
Sensing: defence science and technology capability
Crumbs! Understanding Data: a Dstl biscuit book

NATO Architecture Framework, Version 4

Last updated: 31 Aug. 2022 17:11

The aim of the NATO Architecture Framework Version 4 (NAFv4) is to provide a standard for developing and describing architectures for both military and business use. It provides a standardized way to develop architecture artefacts, by defining Methodology (how to develop architectures and run an architecture project), Viewpoints (conventions for the construction, interpretation and use of architecture views for communicating the enterprise architecture to different stakeholders), Meta-Model (the application of commercial meta-models identified as compliant with NATO policy), and a Glossary, References and Bibliography.

Thoughts

Cabinet Office

Thanks!

Ben Vandersteen
@ben_vandersteen