



Road to Google Cloud Certification

Study Group - Week 6

-  GDG Cloud Paris
-  GDG Cloud Nantes
-  GDG Cloud IoT Lyon
-  GDG Cloud Abidjan

-  GDG Paris
-  GDG Bordeaux
-  GDG Le Mans
-  GDG Mons
-  GDG Abomey-Calavi

Week 6

Professional Cloud Architect

Tous les mardi de 13h à 13h45



[Slack: Rejoignez le canal #cloud-architect-french](#)

RSVP aux events de votre GDG



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```

“

Tour de table
GDG
GDE
...et vous !



Vous êtes 287+ inscrits !



Beaucoup moins de monde sur Slack!

”





Jb Cotard

GDG Le Mans & Kahoot Organizer
Lead Tech / CNAM

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Julien Landuré

GDG Cloud Nantes & GDE Cloud
CTO / Zenika



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Louis Tournayre

GDG Cloud &IoT Lyon
Consultant / Zenika



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1

Où en sommes-nous ?

2

Revue de l'apprentissage de la semaine

3

Initiatives de la communauté

4

Passage de l'examen

5

Quizz

6

Séance de questions / réponses

Où en sommes-nous ?

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Professional Cloud Architect

Learning Journey

Pre-work	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Exam
Have real world hands on experience Review the PCA Exam Guide Review the PCA Sample Questions	A FAIRE AVANT LE 18 AVRIL On-demand training: Preparing for the Professional Cloud Architect Exam Google Cloud Fundamentals: Core Infrastructure Hands On Lab Practice:  Create and Manage Cloud Resources Skill Badge (5 hrs)	A FAIRE AVANT LE 25 AVRIL On-demand training: Essential Google Cloud Infrastructure: Foundation Essential Google Cloud Infrastructure: Core Services Hands On Lab Practice:  Perform Foundational Infrastructure Tasks in Google Cloud Skill Badge (4 hrs)	A FAIRE AVANT LE 02 MAI On-demand training: Elastic Google Cloud Infrastructure: Scaling and Automation Hands On Lab Practice:  Set Up and Configure a Cloud Environment in Google Cloud Skill Badge (6 hrs)	A FAIRE AVANT LE 09 MAI On-demand training: Reliable Cloud Infrastructure: Design and Process Hands On Lab Practice:  Automating Infrastructure on Google Cloud with Terraform Skill Badge (6 hrs)	A FAIRE AVANT LE 16 MAI On-demand training: Getting Started with Google Kubernetes Engine Hands On Lab Practice:  Deploy and Manage Cloud Environments with Google Cloud Skill Badge (8 hrs)	A FAIRE AVANT LE 23 MAI On-demand training: Logging, Monitoring and Observability in Google Cloud Hands On Lab Practice:  Optimize Costs for Google Kubernetes Engine Skill Badge (6 hrs) Check Readiness: PCA Sample Questions	
	EXAM GUIDE REVIEW + STUDY GROUP Mardi 18 Avril	EXAM GUIDE REVIEW + STUDY GROUP Mardi 25 Avril	EXAM GUIDE REVIEW + STUDY GROUP Mardi 02 Mai	EXAM GUIDE REVIEW + STUDY GROUP Mardi 09 Mai	EXAM GUIDE REVIEW + STUDY GROUP Mardi 16 Mai	EXAM GUIDE REVIEW + WRAP UP Mardi 23 Mai	



**Self study
(and potential exam)**

Revue de l'apprentissage de la semaine

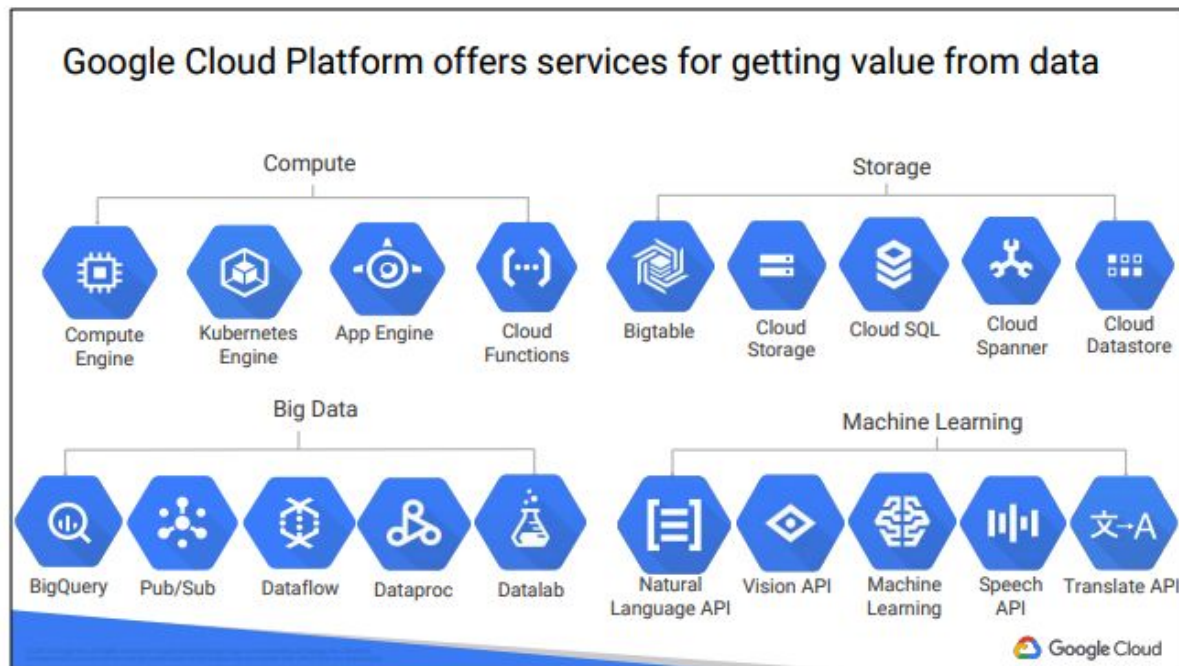
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Welcome to Preparing for the Professional Cloud Architect Exam



GCP Fundamentals: Core Infrastructure



PCA Case Studies

- [EHR Healthcare](#)
- [Helicopter Racing League](#)
- [Mountkirk Games](#)
- [TerramEarth](#)



CASESTUDIES

Astuces

- [Professional Cloud Architect Certification Learn](#)
- N'apprenez pas par coeur les PDFs : ils sont disponibles pendant l'examen
- Travaillez les Case Studies : Vous aurez à coup des questions dessus !



CASESTUDIES

Technical evaluation

Existing Environment	Technical Watchpoints	Proposed Product/Solution
Customer-facing applications are web-based, and many have recently been containerized to run on a group of Kubernetes clusters.	Compute • Containerized applications • Needs to run in the cloud and integrate with on-premises systems • Autoscaling, low latency • Robust logging, monitoring and alerting required	
Software is currently hosted in multiple colocation facilities. The lease on one of the data centers is about to expire.	Storage • Currently in multiple databases including MySQL, MS SQL Server, Redis, and MongoDB	
Data visualization • Nonexistent or minimal	Data needs • Fast on-boarding of insurance providers and their data • Data Analytics needed to predict industry and health care trends • 99.9% availability for customer-facing data systems	

Technical evaluation

Existing Environment	Technical Watchpoints	Proposed Product/Solution
Existing games migrated to Google Cloud using lift-and-shift VM migrations	Compute • New game backend to be Google Kubernetes Engine • Need to scale across regions • Use GPU processing to render graphics for multi-platform • Eventual migration of existing games to new platform	
Separate environments for development and testing	Storage • New game to using a multi-region cluster for global leaderboard	
	Data ingestion • Live metrics from game server • Game logs stored in structured files for future analysis	



Ro

Technical evaluation

Existing Environment	Technical Watchpoints	Proposed Product/Solution
Core of their mission-critical applications runs on their current public cloud provider. Video recording and editing is performed at the race tracks, and the content is encoded and transcoded, where needed, in the cloud.	Compute Video encoding and transcoding is performed on VMs created for each job.	
Content is stored in an object storage service on their existing public cloud provider.	Storage Large file object storage (BLOB)	
Low latency streaming for large numbers of viewers Race predictions use TensorFlow on VMs	Data (videos) - Large number of concurrent streaming video viewers - Ability to create “datamart”	

Technical Evaluation

Existing Environment	Technical Watchpoints	Proposed Product/Solution
- Multiple systems run in Google Cloud; some legacy systems still - Web frontend for dealers and customers is in Google Cloud and allows access to stock management and analytics	Applications - Container-based workloads - Highly scalable - Cloud-native solutions for keys and secrets management	
Vehicles 2 million vehicles x 200 to 500 MB/day	Migration and Partner Access Create abstraction layer for HTTP API	
Manufacturing - Sensor data is captured from two plants and sent to private data centers - legacy inventory and logistics systems - Private data centers have network interconnects to Google Cloud	Development - Modernize CI/CD pipelines - Create self-service portal for project and resource mgmt	

Designing and Implementing

16

Designing Network, Storage, and Compute Resources

Exam outline

Tips

Integration with on premises/multi-cloud environments	When to use gsutil, rsync, and Storage Transfer Service
Cloud native networking (VPC, peering, firewalls, container networking)	Understand all the networking services and how to connect for throughput, security, billing, and so forth.
Identification of data processing pipeline matching data characteristics to storage systems	Velocity (how frequent), Volume (how much), Variety (format, structure), Volatility (how often does it change) – which services match?
Data flow diagrams	Very helpful to know where the data will travel through the solution and to look for bottlenecks and flow monitoring and control
Storage system structure (e.g., Object, File, RDBMS, NoSQL, NewSQL)	ACID—What is eventual consistency ? BASE. Structure requirements?
Mapping compute needs to platform products	Scale, capacity, control/overhead?



Optimizing and Operating

Designing for Security	
Exam outline	Tips
Identity and Access Management (IAM)	Use groups.
Data security (key management, encryption)	Principle of least privilege.
Resource hierarchy (organizations, folders, projects)	Separation of responsibilities to match organization structure
Penetration testing	Shape the scope and the objectives of the test.
Separation of duties	Isolate key roles. Always have an alternate/secondary who can take over if needed. Service accounts.
Security controls	How are you monitoring security? What logs and reports are available to you? What responses will you take?
Managing customer-supplied encryption keys with Cloud KMS	Key management, key rotation, standards and policy compliance



TIP

Can you apply the "principle of least privilege" in case examples?



Road to Certification

Initiatives de la communauté

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Notes de vidéos

> [lien vers le gDoc](#)

 Google Developer Groups

Road to Google Developers Certification

 Google Cloud



Joffrey Jougon 15:16

Hello tout le monde,

Juste pour vous partager un tips auquel j'ai pensé pour mieux réviser en utilisant Chat GPT 🤖

Dès que j'ai fini une vidéo, je copie colle le texte manuscrit des vidéos et lui envoie le contenu en lui demandant de me faire des notes (voir photos)

Je me suis dis que ça pouvait être pas mal plutôt que d'investir dans un bouquin, et puis comme ça, je suis sur que les infos sont à jour 😊

Faites juste attention de bien relire, on est jamais à l'abri des mauvaises surprises, mais globalement il renvoie toujours du bon contenu 😊

2 files ▼



3



2



1



1





Vouchers : coupons de réductions

> Bonne nouvelle !!



 Google Developer Groups

Road to Google Developers Certification

 Google Cloud



Comment en avoir ?



> 17 demandes à date !



Julien Landuré - Admin (GDG Cloud Nantes) 10:02

@channel

Voici le formulaire pour demander le tant attendu  **VOUCHER**  un coupon pour avoir la certification à 50% de son prix (100\$ au lieu de 200\$)



https://docs.google.com/forms/d/e/1FAIpQLSduiIR2g6c9piqrOCj6_aq6SNT67Uh6KXaMO1Ozng84gdl61w/viewform

Merci de prendre  3 minutes pour le remplir !! 



5



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Passage de l'examen

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Points importants

- En ligne ou sur site
- Durée : 2 heures
- 50 questions en QCM
(majoritairement un choix de réponse et quelques questions multi-réponses)
- S'enregistrer ici 🖱️
[https://webassessor.com/wa.do?
page=publicHome&branding=G
OOGLECLOUD](https://webassessor.com/wa.do?page=publicHome&branding=GOOGLECLOUD)



Astuces

- Utilisez votre expérience et ayez un recul d'Architecte
- Lisez plusieurs fois les questions et réponses (*anglais – must, should, could*)
- Marquez les questions difficiles pour y revenir ensuite
- Dormez correctement la veille et passez la certification le matin



Liens utiles en vrac

1. <https://cloud.google.com/deployment-manager/docs/fundamentals>
2. <https://cloud.google.com/blog/products/gcp/available-or-not-that-is-the-question-cre-life-lessons>
3. <https://cloud.google.com/iam/docs/understanding-roles>
4. <https://cloud.google.com/kubernetes-engine/docs/concepts/deployment>
5. <https://cloud.google.com/dataflow#all-features>
6. <https://cloud.google.com/vpc/docs/vpc-peering>
7. <https://cloud.google.com/network-connectivity/docs/interconnect/concepts/partner-overview>
8. <https://cloud.google.com/load-balancing/docs/ssl>
9. https://cloud.google.com/vpc/docs/firewalls#priority_order_for_firewall_rules
10. <https://cloud.google.com/compute/docs/regions-zones/global-regional-zonal-resources#regionalresources>
11. <https://cloud.google.com/compute/docs/ip-addresses>
12. <https://cloud.google.com/vpc/docs/add-remove-network-tags>
13. <https://cloud.google.com/solutions/filers-on-compute-engine>
14. <https://cloud.google.com/products/databases>
15. <https://cloud.google.com/storage/docs/lifecycle>

Exemple de questions !

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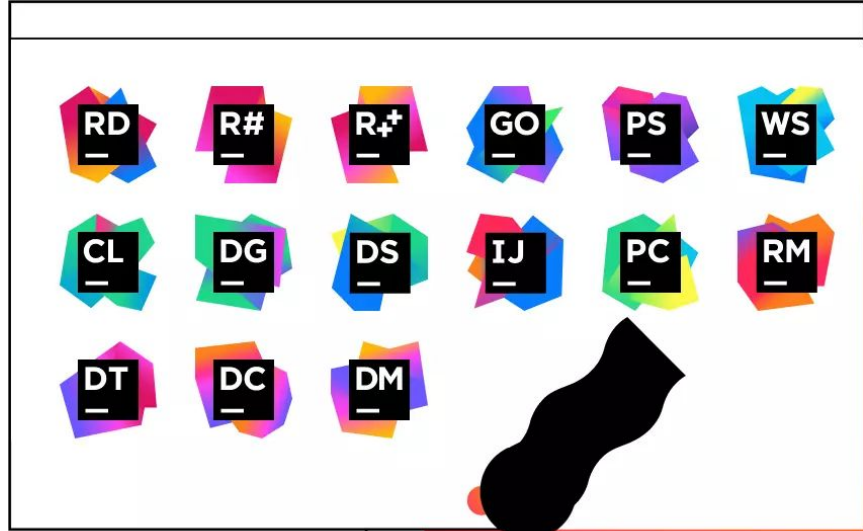
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Gagnez une licence JetBrains

> c'est cadeau 🎉



 Google Developer Groups

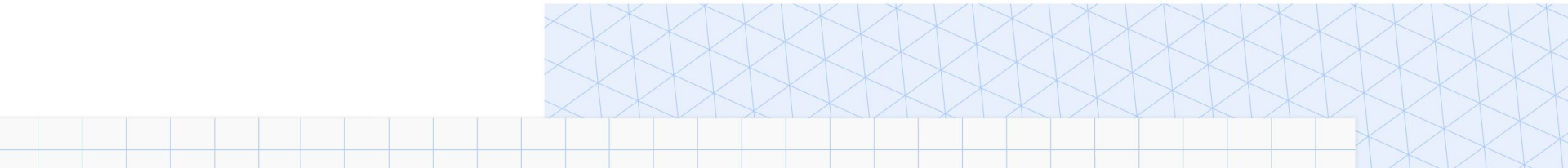
Road to Google Developers Certification

 Google Cloud

QUIZZ time !

<https://kahoot.it/?pin=2436302>

243 6302

A decorative graphic at the bottom of the slide consisting of a light blue grid pattern. The grid is composed of small squares, some of which are filled with a darker blue color, creating a subtle geometric design.

C'est la fin les ami•e•s !

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Professional Cloud Architect

Learning Journey

Pre-work	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Exam weeks
Have real world hands on experience Review the PCA Exam Guide Review the PCA Sample Questions	On-demand training: Preparing for the Professional Cloud Architect Exam Google Cloud Fundamentals: Core Infrastructure Hands On Lab Practice:  Create and Manage Cloud Resources Skill Badge (5 hrs)	On-demand training: Essential Google Cloud Infrastructure: Foundation Essential Google Cloud Infrastructure: Core Services Hands On Lab Practice:  Perform Foundational Infrastructure Tasks in Google Cloud Skill Badge (4 hrs)	On-demand training: Elastic Google Cloud Infrastructure: Scaling and Automation Hands On Lab Practice:  Set Up and Configure a Cloud Environment in Google Cloud Skill Badge (6 hrs) 	On-demand training: Reliable Cloud Infrastructure: Design and Process Hands On Lab Practice:  Automating Infrastructure on Google Cloud with Terraform Skill Badge (6 hrs)	On-demand training: Getting Started with Google Kubernetes Engine Hands On Lab Practice:  Deploy and Manage Cloud Environments with Google Cloud Skill Badge (8 hrs)	On-demand training: Logging, Monitoring and Observability in Google Cloud Hands On Lab Practice:  Optimize Costs for Google Kubernetes Engine Skill Badge (6 hrs) Check Readiness: PCA Sample Questions	Self study (and potential exam) 
	EXAM GUIDE REVIEW + STUDY GROUP	EXAM GUIDE REVIEW + STUDY GROUP	EXAM GUIDE REVIEW + STUDY GROUP	EXAM GUIDE REVIEW + STUDY GROUP	EXAM GUIDE REVIEW + STUDY GROUP	EXAM GUIDE REVIEW + WRAP UP	

BRAVO



Restez affuté !

Semaine 6 et l'après

- Testez-vous avec le [PCA Sample Questions](#)
- Parcourez la doc GCP et les ateliers cloudskillsboost
- ⚡ **Partagez vos retours de passage de la certification dans SLACK**

La suite

- Prenez rdv pour passer l'examen et ne pas tout oublier
- Astuce : passer la certification avant vos vacances d'été !
 - Allez sur : webassessor.com/googlecloud

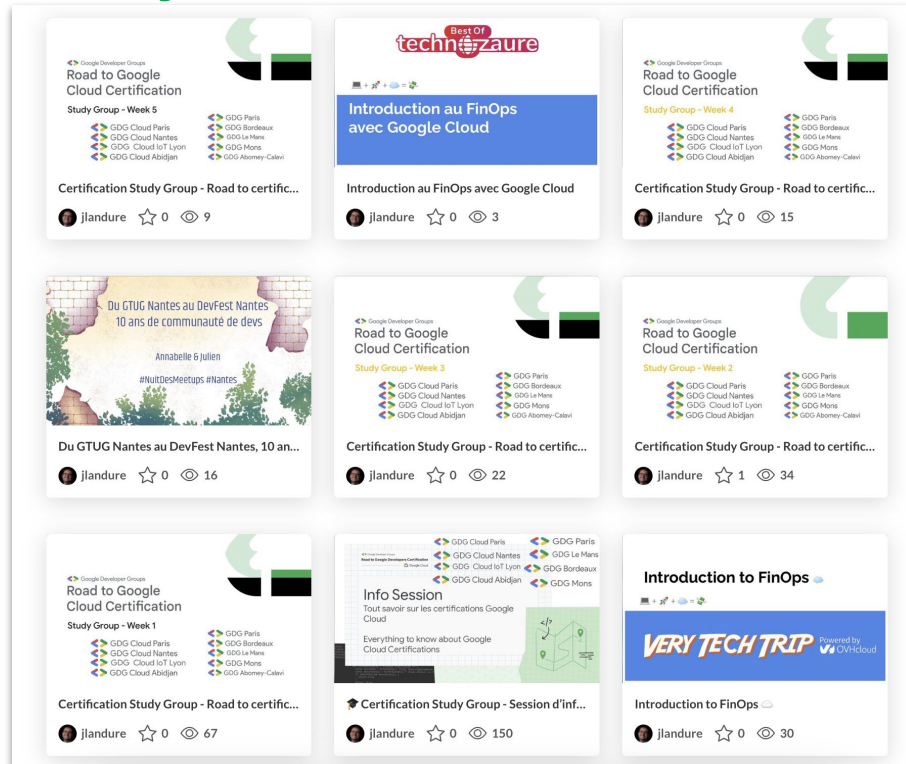


Revivez votre parcours – Slides

> <https://speakerdeck.com/jlandure>



Road to Google Developers Certification



Revivez votre parcours – Video

> Youtube

Vidéos ▶ Tout lire

[GDG] Certification Study Group - Semaine 5 - Google...	[GDG] Certification Study Group - Semaine 4 - Google...	[GDG] Certification Study Group - Semaine 3 - Google...	[GDG] Certification Study Group - Semaine 2 - Google...	[GDG] Certification Study Group - Semaine 1 - Google...
31 vues • il y a 3 jours	38 vues • il y a 12 jours	46 vues • il y a 2 semaines	56 vues • il y a 3 semaines	161 vues • il y a 1 mois

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UN GRAND MERCI !



Google Developer Groups

Road to Google Cloud Certification

Study Group - Week 6



GDG Cloud Paris



GDG Cloud Nantes



GDG Cloud IoT Lyon



GDG Cloud Abidjan



GDG Paris



GDG Bordeaux



GDG Le Mans



GDG Mons



GDG Abomey-Calavi

Q&A

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Thank you for tuning in!

For any operational questions about access to Cloud Skills Boost or the Road to Google Developers Certification program contact:

gdg-support@google.com



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