

Cloud Networks

Submitted by

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Google Cloud Platform

Why do we need Cloud



why

too much data for your computers/servers

too much computation for your
computers/servers

Hard to scale your PC/servers



Why not

we need a website

It sounds cool.

Why Google Cloud Platform?

Access Control

- public,
- private networks
- block storage.

Encryption

- No worries about leaks because all block storages will be encrypted.

Encapsulation

- All instances, virtual machines, networks, and resources will be encapsulated to prevent theft. Google's Secure Cloud



We'll use Google's infrastructure

Virtual Machines
Networks
Storage



kept in a secure location

Google's Data Center



Google will handle those for you.

Scaling
Migrating
Maintenance

Take over any tasks that you don't want to do.

Google Cloud Family

Compute



App Engine



Compute Engine

Storage



Cloud Storage



Cloud SQL



Cloud Datastore

App Services



BigQuery



Cloud Endpoints



Google Cloud Platform

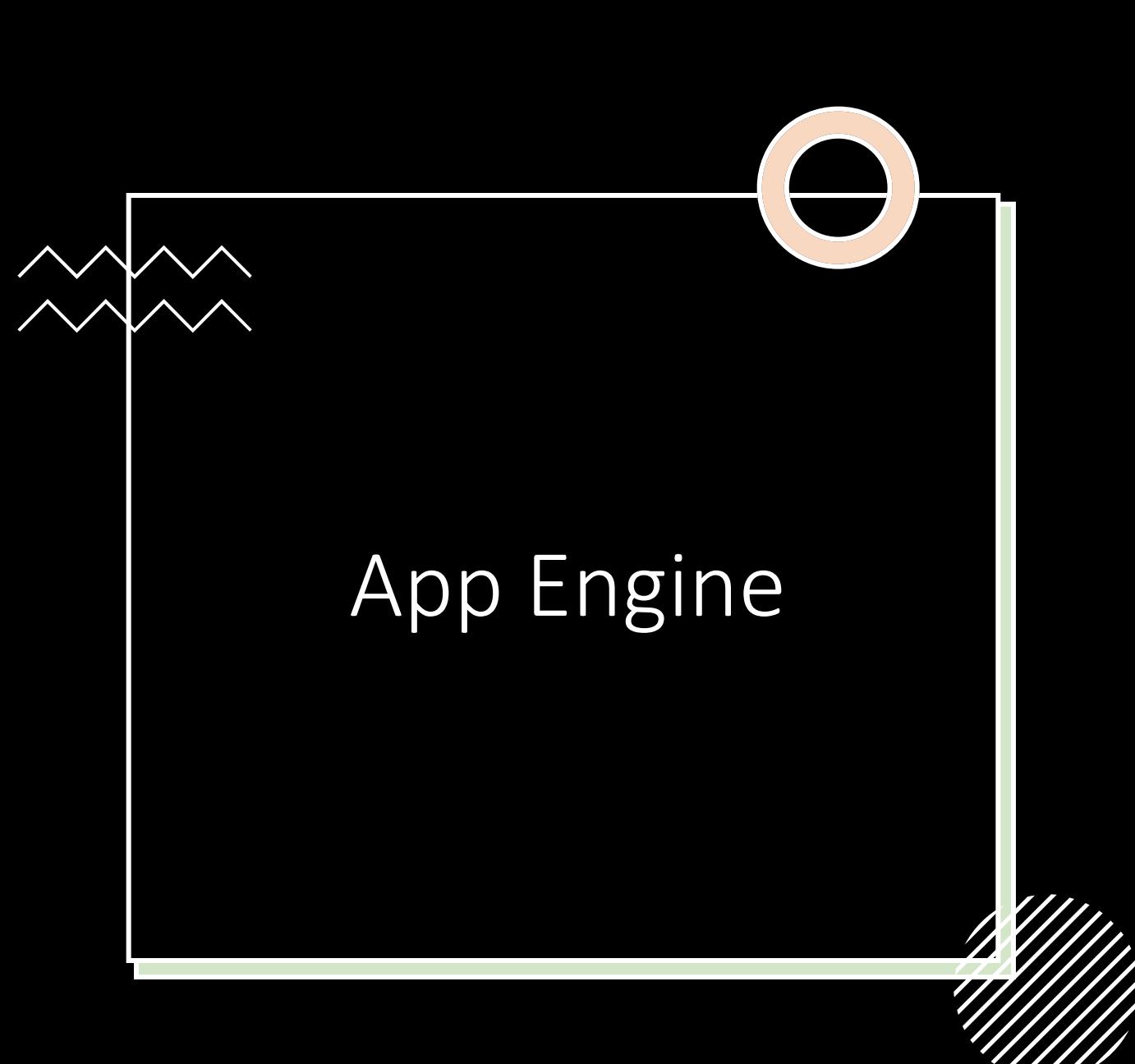
Google Cloud Platform

Google Cloud Platform, offered by Google, is a suite of **cloud computing services** that runs on the **same infrastructure** that Google uses internally for its end-user products, such as Google Search, Gmail, Google Drive, and YouTube.

Google Cloud Platform provides

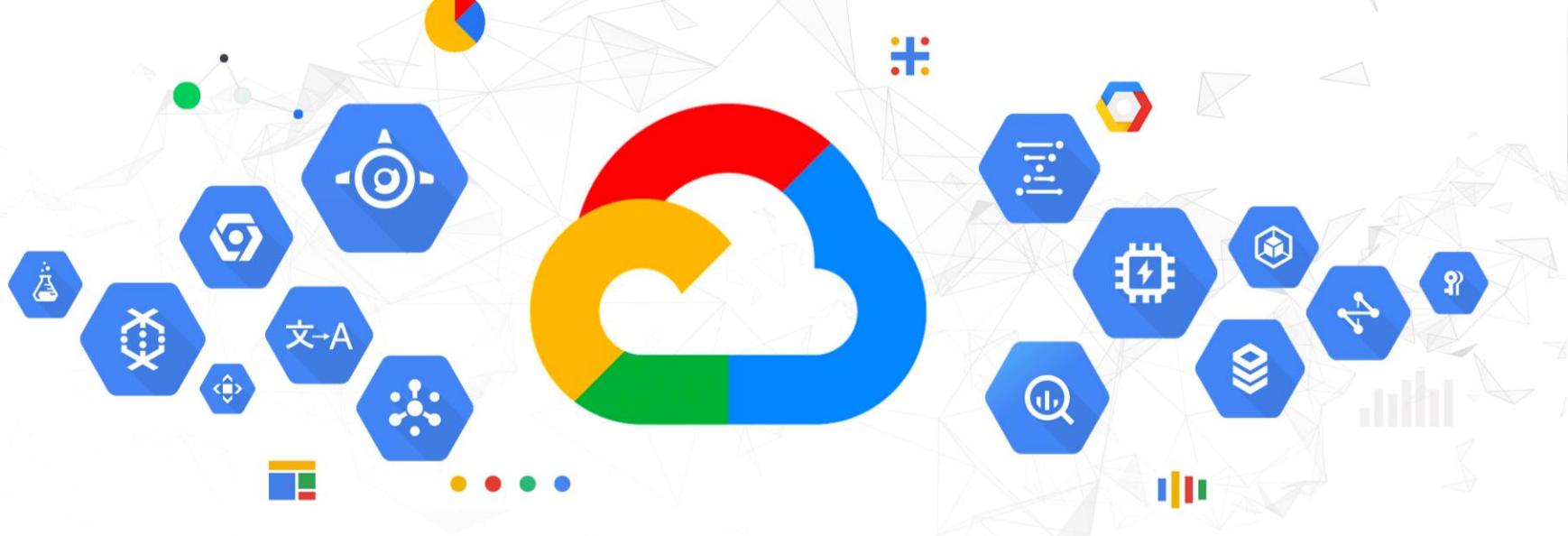
- IaaS,
- PaaS,
- and **serverless computing** environments.





App Engine

- In April 2008, Google introduced App Engine.
- A development and hosting platform for web applications in Google-managed data centers
- Google expanded the platform's cloud services.
- Google Cloud is not only cheaper but also has
 - one of the world's largest networks!
 - Less latency and better compute prices!



What is Google Cloud Platform?

What are the Benefits to Hosting Your Website or App There?

TOP 7 BENEFITS OF USING GOOGLE CLOUD HOSTING



Cloud Analogy



Availability of a better
price plan



Improved
performance



Advantage of
Live migration



Private network



Redundant
backup



Commitment to Sustainable
Development



Control
and security

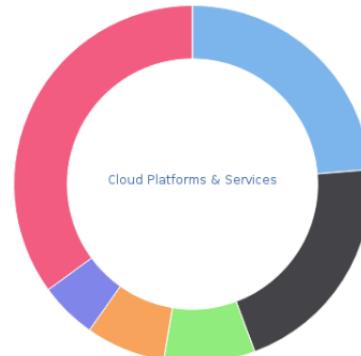
What are the services offered by Google Cloud Platform



How many companies are using Google Cloud?

4,422,645
Companies using Cloud Platforms & Services

Cloud Platforms & Services



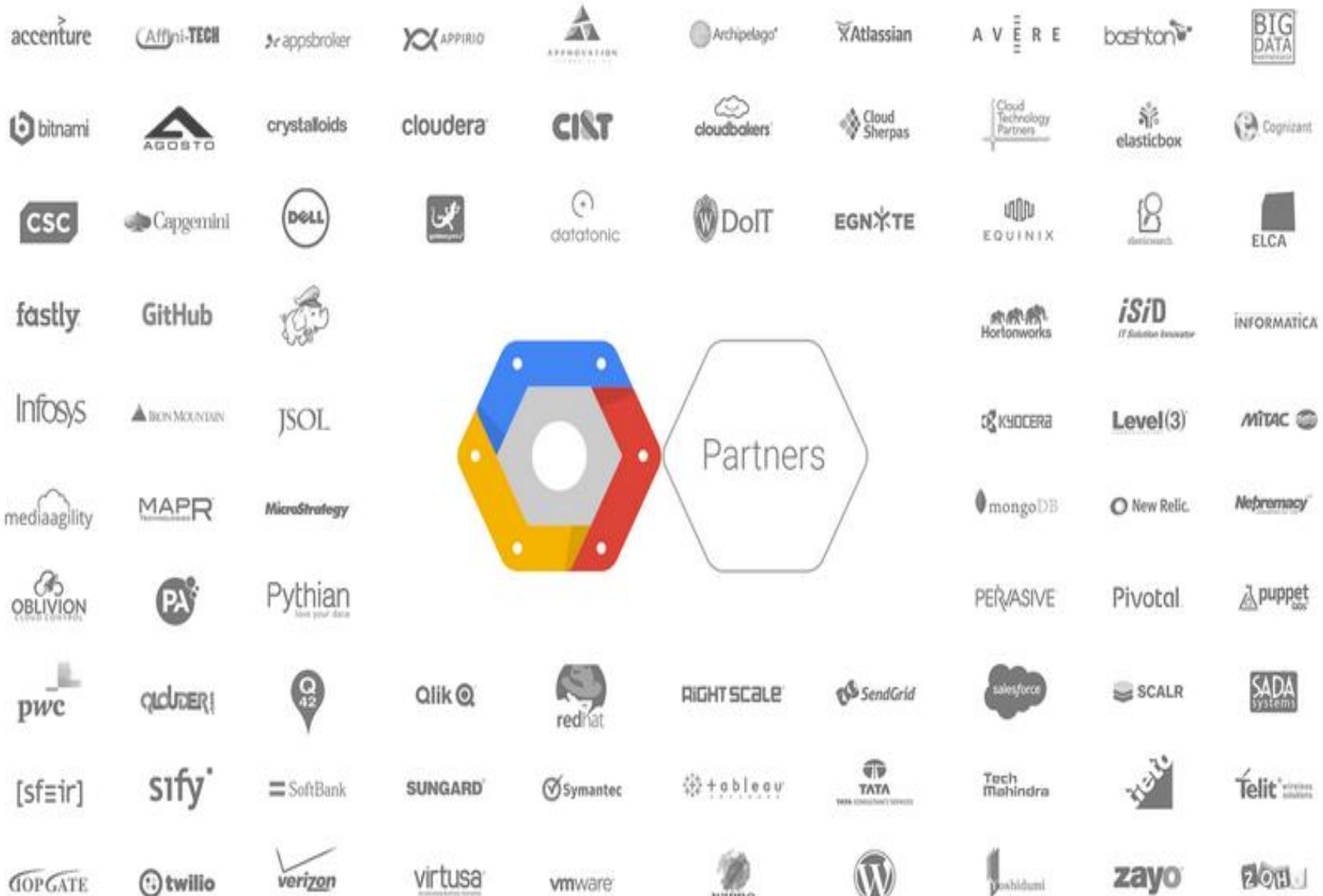
Cloud Platforms & Services

Amazon AWS (23.00%)
Google Cloud Platform(GCP) (20.00%)
Amazon S3 (8.00%)
Amazon EC2 (7.00%)
Rackspace (6.00%)

916,631 companies

We have data on 916,631 companies that use Google Cloud Platform(GCP). The companies using Google Cloud Platform(GCP) are most often found in United States and in the Hospital & Health Care industry. Google Cloud Platform(GCP) is most often used by companies with 10-50 employees and 1M-10M dollars in revenue.

Companies that use Google Cloud Platform



Google Cloud Platform Security Features



Try Google Cloud for free

Step 1 of 3 Account Information

 pranay reddy pranayreddy.w@gmail.com [SWITCH ACCOUNT](#)

Country
United States

What best describes your organization or needs?
Please select

Terms of Service
 I have read and agree to the [Google Cloud Platform Terms of Service](#), [Supplemental Free Trial Terms of Service](#), and the terms of service of [any applicable services and APIs](#).
Required to continue

CONTINUE

Privacy policy | FAQs

Try Google Cloud for free

Step 1 of 3 Account Information

 pranay reddy pranayreddy.w@gmail.com [SWITCH ACCOUNT](#)

Country
United States

What best describes your organization or needs?
Please select
Startup

Apply for additional credits (optional)
As part of an organization you may be eligible for an additional \$100 in Free Trial credits to help you evaluate Google Cloud. To qualify, just enter a work email for verification.

Work email
E.g. name@yourorganization.com

Terms of Service
 I have read and agree to the [Google Cloud Platform Terms of Service](#), [Supplemental Free Trial Terms of Service](#), and the terms of service of [any applicable services and APIs](#).
Required to continue

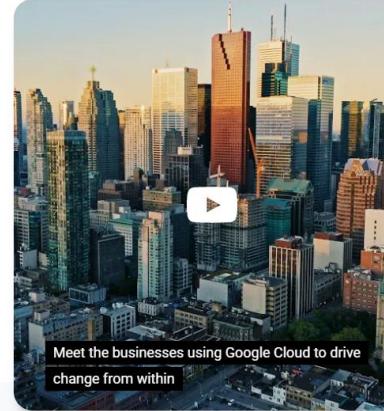
CONTINUE

Get the latest [updates on Apache Log4j 2 vulnerabilities](#).

Dream, build, and transform with Google Cloud

Build apps faster, make smarter business decisions, and connect people anywhere.

[Get started for free](#) [Contact sales](#)



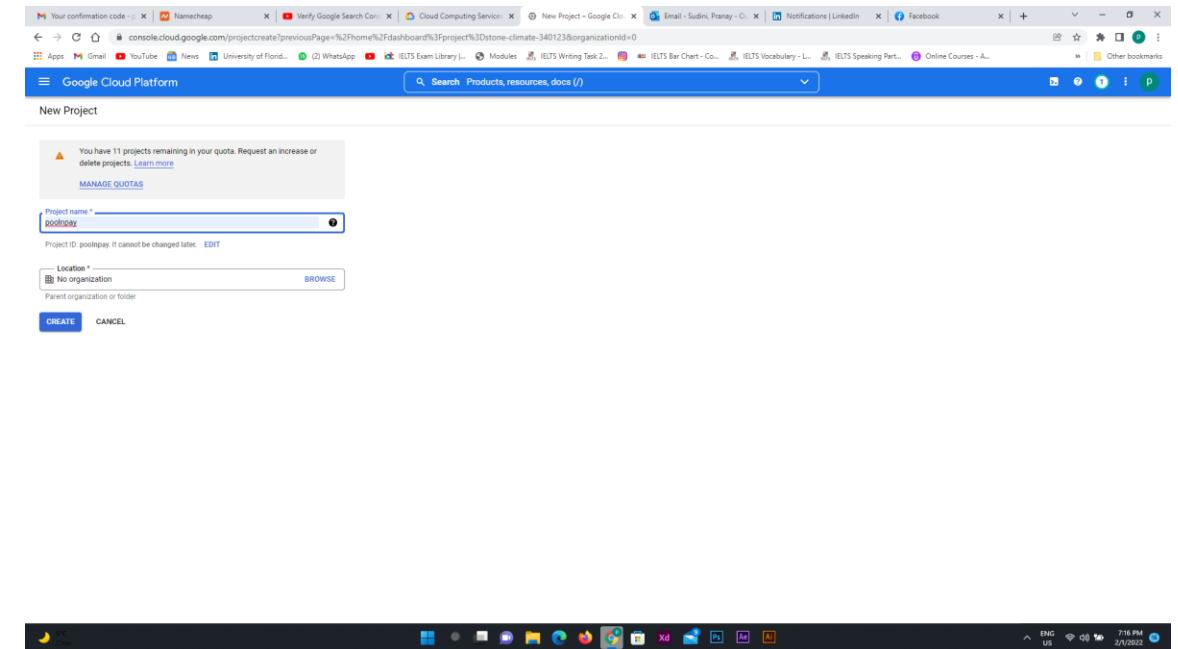
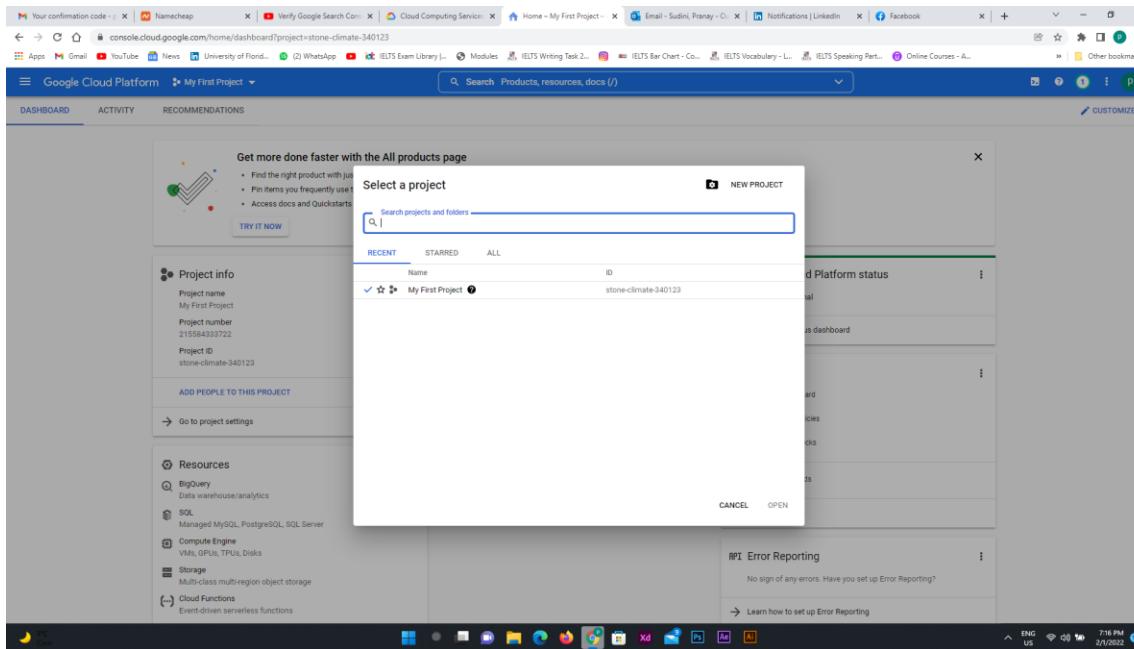
Meet the businesses using Google Cloud to drive change from within

What's new [For developers](#)

- EVENT** It's a wrap! Next '21 content now available on demand 
- 2-MINUTE QUIZ** How data-driven is your company culture? 
- REPORT** Discover why 64% of manufacturers rely on AI 



Create a new project



Create a Bucket

The screenshot shows the Google Cloud Platform dashboard for the project 'poolpay'. The left sidebar is pinned with 'Cloud Storage' under 'Compute Engine'. The main area displays 'Project info' and 'RPI APIs' sections. A modal window titled 'Get more done faster with the All products page' is open, listing benefits like finding the right product with one click and pinning items to your menu. The bottom status bar shows the URL <https://console.cloud.google.com/storage/browser/project=poolpay>, the date 2/1/2022, and the time 7:18 PM.

The screenshot shows the 'Cloud Storage' browser interface. It features a top navigation bar with tabs for 'Browser', 'Monitoring', and 'Settings'. Below is a table with columns for Name, Created, Location type, Location, Default storage class, Last modified, Public access, Access control, Protection, and Lifecycle. A large central area contains a 3D globe icon with colored dots (red, green, blue) and text encouraging users to 'Store and retrieve your data' by creating a bucket. At the bottom are 'CREATE BUCKET' and 'TAKE QUICKSTART' buttons. The right sidebar includes sections for 'Recommended for you', 'Transfer data into Cloud Storage', 'Host website content', 'You might also like', and 'All product documentation'.

Domain

Google Cloud Platform poolpay > Create a bucket

Name your bucket

Pick a globally unique, permanent name. [Naming guidelines](#)

Ex: 'example', 'example_bucket-1', or 'example.com/'

Tip: Don't include any sensitive information

LABELS (OPTIONAL)

CONTINUE

Choose where to store your data

Location: us (multiple regions in United States)
Location type: Multi-region

Choose a default storage class for your data

Default storage class: Standard

Choose how to control access to objects

Public access prevention: Off
Access control: Uniform

Choose how to protect object data

Protection tools: None
Data encryption: Google-managed key

CREATE CANCEL

Monthly cost estimate

Enter values below to check this bucket's monthly cost. For guidance only. [Pricing details](#)

Storage and retrieval

Storage size: 0 GB
\$0.025 per GB-month

Data retrieval size: 0 GB
Free

Object versioning: Off

If you enable versioning, note that noncurrent versions are billed at the same rate as live objects.

Operations

Class A operations: \$0.005 per 1,000 ops

Class B operations: \$0.0054 per 1,000 ops

Availability SLA: 99.95%

Monthly cost: \$0.00

Currency: US Dollar (\$)

7:18 PM 7:18 PM

Google Cloud Platform poolpay > Create a bucket

Name your bucket

Pick a globally unique, permanent name. [Naming guidelines](#)

www.poolpay.com

Tip: Don't include any sensitive information

A bucket name can only use dots (.) to form a valid domain name (e.g., example.com). If you haven't verified that you're authorized to use this domain, you'll have to do so to create this bucket. [Learn more](#)

LABELS (OPTIONAL)

CONTINUE

Choose where to store your data

Location: us (multiple regions in United States)
Location type: Multi-region

Choose a default storage class for your data

Default storage class: Standard

Choose how to control access to objects

Public access prevention: Off
Access control: Uniform

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Data encryption: Google-managed key

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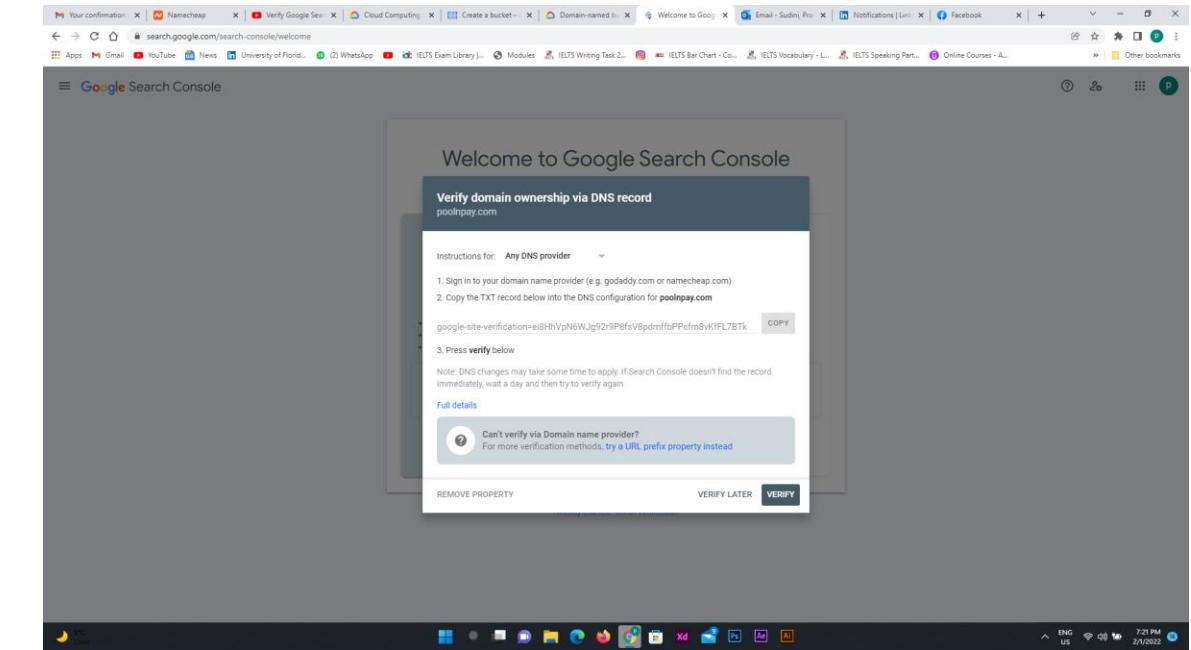
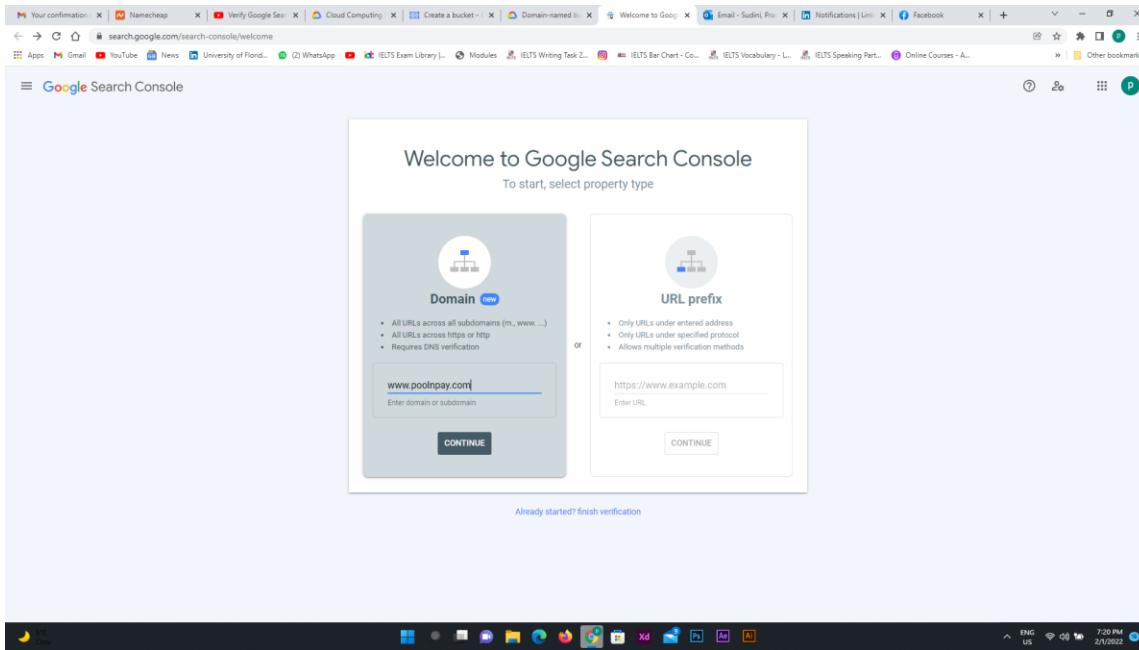
Availability SLA: 99.95%

Monthly cost: \$0.00

Currency: US Dollar (\$)

7:18 PM 7:18 PM

Domain Verification



Namecheap

The screenshot shows the Namecheap Domain Control Panel for the domain poolnpay.com. The main navigation bar includes Domains, Hosting, WordPress, Email, Apps, Security, Transfer to Us, Help Center, and Account. On the left sidebar, there are links for Dashboard, Expiring / Expired, Domain List (which is selected), Hosting List, Private Email, SSL Certificates, Apps, and Profile. The central panel displays the domain details for poolnpay.com, including its status as ACTIVE (valid until Feb 1, 2023), protection settings, and PremiumDNS options. It also shows basic DNS settings and a redirect feature from poolnpay.com to http://www.poolnpay.com/. The bottom of the screen shows a Windows taskbar with various pinned icons.

The screenshot shows the Namecheap Advanced DNS section for the poolnpay.com domain. The left sidebar includes links for Dashboard, Expiring / Expired, Domain List (selected), Hosting List, Private Email, SSL Certificates, Apps, and Profile. The main content area shows the configuration for a URL Redirect Record pointing to http://www.poolnpay.com/ and a TXT Record for verification. It also includes sections for DNSSEC, Mail Settings, and Dynamic DNS. A Personal DNS Server section at the bottom allows users to register or find nameservers. The bottom of the screen shows a Windows taskbar with various pinned icons.

Ownership

The screenshot shows the Namecheap Domain Control Panel interface. On the left, a sidebar menu includes options like Dashboard, Expiring / Expired, Domain List (selected), Hosting List, Private Email, SSL Certificates, Apps, and Profile. The main area displays a list of DNS records for the domain poolnpay.com. There are two entries: a URL Redirect Record for http://www.poolnpay.com/ (Unmasked) and a TXT Record for google-site-verification with the value e8HtVpsN6WJg929P0ts8pdmffbPPc... (Automatic). Below these, sections for DNSSEC, Mail Settings (Email Forwarding), and Dynamic DNS are visible. At the bottom, there's a Personal DNS Server section with a Register Nameserver button and a search bar.

The screenshot shows the Google Search Console interface. The main window displays a green banner stating "Welcome to Google Search Console" and "Ownership verified". It also mentions "Verification method: Domain name provider". Below the banner, there are "DONE" and "GO TO PROPERTY" buttons. A note at the bottom says "Already started? finish verification". The top of the screen shows a browser toolbar with various tabs and icons.

Region

Screenshot of the Google Cloud Platform (GCP) Cloud Storage "Create a bucket" interface.

Name your bucket: www.poolnpay.com

Choose where to store your data:

- Location type:** Region (selected)
- Storage size:** 0.020 per GB-month

Storage and retrieval:

- Data retrieval size:** Free
- Object versioning:** Off
- Operations:**
 - Class A operations:** \$0.005 per 1,000 ops
 - Class B operations:** \$0.0004 per 1,000 ops

Availability SLA: 99.9%

Monthly cost: \$0.00

Currency: US Dollar (\$)

Create Bucket

Cloud Storage

Browser

Monitoring

Settings

Marketplace

Release Notes

Cloud Computing Services

Create a bucket - Cloud S...

Email - Sudini, Pranay - Ou...

Notifications | LinkedIn

Facebook

Apps Gmail YouTube News University of Florid... (2) WhatsApp IELTS Exam Library |... Modules IELTS Writing Task 2... IELTS Bar Chart - Co... IELTS Vocabulary - L... IELTS Speaking Part... Online Courses - A...

Other bookmarks

Search Products, resources, docs (/)

CONTINUE

CREATE CANCEL

5°C Clear

ENG US 7:19 PM 2/1/2022

Storage and control

Google Cloud Platform - poolplay - Create a bucket

Name your bucket
Name: www.poolpay.com

Choose where to store your data
Location: us-east1 (South Carolina)
Location type: Region

Choose a default storage class for your data
A storage class sets costs for storage, retrieval, and operations. Pick a default storage class based on how long you plan to store your data and how often it will be accessed. [Learn more](#)

Standard: Best for short-term storage and frequently accessed data

Nearline: Best for backups and data accessed less than once a month

Coldline: Best for disaster recovery and data accessed less than once a quarter

Archive: Best for long-term digital preservation of data accessed less than once a year

CONTINUE

Choose how to control access to objects
Public access prevention: Off
Access control: Uniform

Choose how to protect object data
Protection tools: None
Data encryption: Google-managed key

CREATE CANCEL

Monthly cost estimate

Enter values below to check this bucket's monthly cost. For guidance only. [Pricing details](#)

Storage and retrieval

Storage size: 0 GB
\$0.020 per 6GB-month

Data retrieval size: 0 GB
Free

Object versioning: Off

Operations

Class A operations: \$0.005 per 1,000 ops

Class B operations: \$0.004 per 1,000 ops

Availability SLA: 99.9%

Monthly cost: \$0.00

Currency: US Dollar (\$)

7:19 PM 7/19/2024

Google Cloud Platform - poolplay - Create a bucket

Name your bucket
Name: www.poolpay.com

Choose where to store your data
Location: us-east1 (South Carolina)
Location type: Region

Choose a default storage class for your data
Default storage class: Standard

Choose how to control access to objects

Prevent public access
Restrict data from being publicly accessible via the internet. Will prevent this bucket from being used for web hosting. [Learn more](#)

Enforce public access prevention on this bucket

Access control

Uniform: Ensure uniform access to all objects in the bucket by using only bucket-level permissions (ACLs). This option becomes permanent after 90 days. [Learn more](#)

Fine-grained: Specify access to individual objects by using object-level permissions (ACLS) in addition to your bucket-level permissions (ACLs). [Learn more](#)

CONTINUE

Choose how to protect object data
Protection tools: None
Data encryption: Google-managed key

CREATE CANCEL

Monthly cost estimate

Enter values below to check this bucket's monthly cost. For guidance only. [Pricing details](#)

Storage and retrieval

Storage size: 0 GB
\$0.020 per 6GB-month

Data retrieval size: 0 GB
Free

Object versioning: Off

If you enable versioning, note that noncurrent versions are billed at the same rate as live objects.

Operations

Class A operations: \$0.005 per 1,000 ops

Class B operations: \$0.004 per 1,000 ops

Availability SLA: 99.9%

Monthly cost: \$0.00

Currency: US Dollar (\$)

7:19 PM 7/19/2024

Protect Data

Google Cloud Platform - poolipay - Create a bucket - Cloud Storage - Google Cloud Platform

Name your bucket | Name: www.poolipay.com

Choose where to store your data | Location: us-east1 (South Carolina) | Location type: Region

Choose a default storage class for your data | Default storage class: Standard

Choose how to control access to objects | Public access prevention: Off | Access control: Uniform

Choose how to protect object data

- None
- Object versioning (best for data recovery)
For restoring deleted or overwritten objects. To minimize the cost of storing versions, we recommend limiting the number of noncurrent versions per object and scheduling them to expire after a number of days. [Learn more](#)
- Retention policy (best for compliance)
For preventing the deletion or modification of the bucket's objects for a specified minimum duration of time after being uploaded. [Learn more](#)

DATA ENCRYPTION

Marketplace | Release Notes

CREATE CANCEL

Monthly cost estimate

Enter values below to check this bucket's monthly cost. For guidance only. [Pricing details](#)

Storage and retrieval

Storage size: 0B \$0.020 per GB-month

Data retrieval size: 0B Free

Object versioning: Off

If you enable versioning, note that noncurrent versions are billed at the same rate as live objects.

Operations

Class A operations: 0.003 per 1,000 ops \$0.003 per month

Class B operations: 0.0054 per 1,000 ops \$0.0054 per month

Availability SLA: 99.9%

Monthly cost: \$0.00

Currency: US Dollar (\$)

7:19 PM 7:19 PM

Google Cloud Platform - poolipay - Create a bucket - Cloud Storage - Google Cloud Platform

Name your bucket | Name: www.poolipay.com

Choose where to store your data | Location: us-east1 (South Carolina) | Location type: Region

Choose a default storage class for your data | Default storage class: Standard

Choose how to control access to objects | Public access prevention: Off | Access control: Uniform

Choose how to protect object data

Protection tools: None

Data encryption: Google-managed key

To create a bucket named www.poolipay.com, you must verify that you're authorized to use that domain name. Follow the link in the Name your bucket step for verification instructions.

CREATE CANCEL

Marketplace | Release Notes

Availability SLA: 99.9%

Monthly cost: \$0.00

Currency: US Dollar (\$)

7:19 PM 7:19 PM

Upload Files

The screenshot shows the Google Cloud Platform Storage console for the bucket `www.poolnpay.com`. The bucket details page is displayed, showing the location as `us-east1 (South Carolina)`, storage class as `Standard`, public access as `Not public`, and protection as `None`. The `OBJECTS` tab is selected, listing the following objects:

Name	Type	Size	Created	Storage class	Last modified	Public access	Version history	Encryption	Retention expiration
<code>css/</code>	Folder	—	—	—	—	—	—	—	—
<code>images/</code>	Folder	—	—	—	—	—	—	—	—
<code>index.html</code>	text/html	1.2 KB	Feb 1, 2022	Standard	Feb 1, 2022	Not public	—	Google-managed key	—

A modal window titled "Uploads and poolnpay operations" is open at the bottom right, showing the status of seven uploaded files: `car.png`, `cloud1.png`, `cloud2.png`, and `cloud3.png`, all marked as "Complete".

The browser's address bar shows the URL `console.cloud.google.com/storage/browser/www.poolnpay.com;tab=objects?project=poolnpay&prefix=&forceOnObjectsSortingFiltering=false`. The taskbar at the bottom includes icons for various applications like Microsoft Word, Excel, and Adobe Photoshop.

www.poolnpay.com

The screenshot shows the Google Cloud Platform storage browser interface. A single bucket named "www.poolnpay.com" is listed. The bucket was created on Feb 1, 2022, at 7:25:10 PM, located in the us-east1 region, with a standard storage class. It has no public access, uniform access control, and no protection or lifecycle rules. The bucket is currently empty. On the right side of the interface, there is a context menu open over the bucket entry, listing options such as "Edit access", "Edit labels", "Edit website configuration", "Edit default storage class", "Delete bucket", "Export to Cloud Pub/Sub", "Process with Cloud Functions", and "Scan with Cloud Data Loss Prevention".

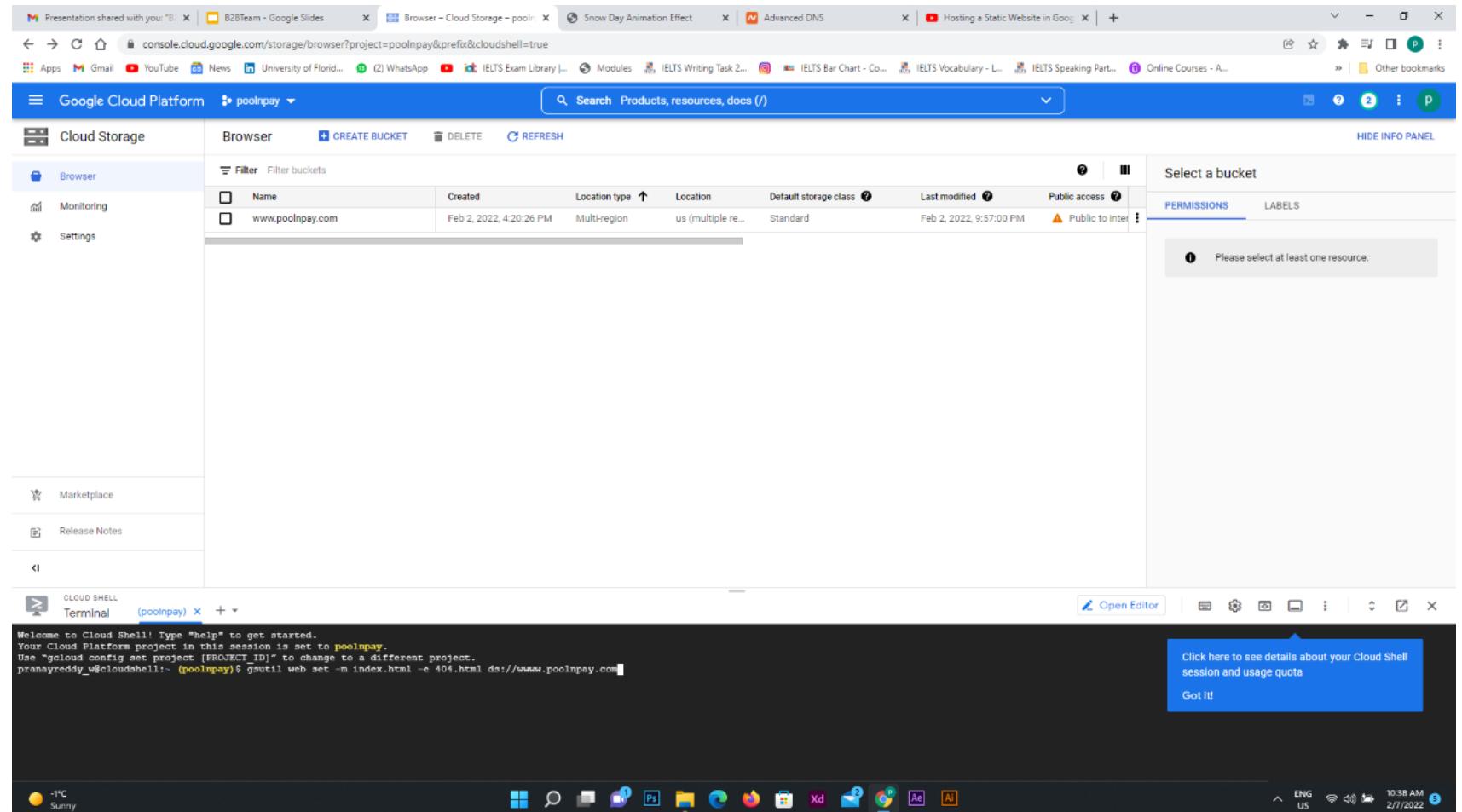
The screenshot shows the same Google Cloud Storage browser interface, but now the "Edit website configuration" option from the previous screenshot has been selected. This has opened a modal dialog box titled "www.poolnpay.com website configuration". The dialog box contains fields for "Index (main) page suffix" (set to "index.html") and "Error (404 not found) page" (set to "index.html"). Below these fields, there is explanatory text: "Specify an object to serve when visitors request a URL that directs to no object or index page. Ex. A user visits example.com/index - if neither that URL nor example.com/index.html exists, the error page is served." At the bottom of the dialog box are "CANCEL" and "SAVE" buttons.

Public & Private

The screenshot shows the Google Cloud Platform Cloud Storage interface. A modal dialog titled "Add principals to 'www.poolnpay.com'" is open. It lists a single principal, "allusers". Below the list, there is a dropdown menu labeled "Select a role" which is currently set to "Storage Object Viewer". Other roles listed include "Storage Admin", "Storage Object Admin", "Storage Object Creator", and "Storage Object Viewer". At the bottom of the dialog, there are "SAVE" and "CANCEL" buttons.

This screenshot shows the same Google Cloud Platform Cloud Storage interface and "Add principals" dialog as the first one. However, the "Select a role" dropdown has been changed to "Storage Admin". The "Storage Object Viewer" role is still visible in the list. The "SAVE" and "CANCEL" buttons are at the bottom.

Active a cloud shell



virtual machine Instance

The screenshot shows the 'Create an instance' wizard in the Google Cloud Platform. The current step is 'Machine configuration'. Key settings include:

- Name:** Instance-1
- Region:** us-central1 (Iowa)
- Zone:** us-central1-a
- Machine type:** e2-medium (2 vCPUs, 4 GB memory)
- Boot disk:** Debian GNU/Linux 10 (buster)
- Identity and API access:** Service account: Compute Engine default service account
- Firewall:** Allow default access
- Networking, Disks, Security Management, Sole-Tenancy:** GCP Free Tier

The screenshot shows the 'Create an instance' wizard in the Google Cloud Platform. The current steps are 'Boot disk' and 'Identity and API access'.

Boot disk:

- Name:** Instance-1
- Type:** New balanced persistent disk
- Size:** 10 GB
- Image:** Debian GNU/Linux 10 (buster)

Identity and API access:

- Service accounts:** Service account: Compute Engine default service account
- Access scopes:** Allow default access
- Firewall:** Add tags and firewall rules to allow specific network traffic from the internet
- Networking, Disks, Security Management, Sole-Tenancy:** GCP Free Tier

IP address

The screenshot shows the Google Cloud Platform Compute Engine interface. On the left, a sidebar menu includes sections for Virtual machines (VM instances, Instance templates, Sole-tenant nodes, Machine images, TPUs, Committed use discounts, Migrate for Compute Engine), Storage (Disks, Snapshots, Images), Instance groups (Instance groups, Health checks), and VM Manager (OS patch management, Marketplace, Release Notes). The main content area is titled 'VM instances' and shows a single instance named 'webserver'. The instance details are as follows:

Status	Name	Zone	Recommendations	In use by	Internal IP	External IP	Connect
Green checkmark	webserver	us-central1-a	Save \$12 / mo Save \$23 / mo		10.128.0.2 (nic0)	108.59.85.166	SSH

Below the table, there are 'Related actions' buttons for View billing report, Monitor VMs, Explore VM logs, Set up firewall rules, and Patch management.

At the top right, a message says "Select an instance" and "Please select at least one resource". The status bar at the bottom shows the date as 2/7/2022 and the time as 10:29 AM.

CName Record

The screenshot shows the Namecheap Advanced DNS interface for the domain poolnpay.com. The left sidebar lists various domain management options: Dashboard, Expiring / Expired, Domain List (selected), Hosting List, Private Email, SSL Certificates, Apps, and Profile. The main content area is titled "poolnpay.com" and features tabs for Domain, Products, Sharing & Transfer, and Advanced DNS (selected). Under the "HOST RECORDS" section, there are three entries:

Type	Host	Value	TTL
CNAME Record	www	c.storage.googleapis.com.	Automatic
TXT Record	@	google-site-verification=ei8HnVpN6WJg92r9P8hsV8pdmlfbPPc...	Automatic
URL Redirect Record	@	http://www.poolnpay.com/	Unmasked

Below the host records, there are sections for DNSSEC (Status: Off) and Mail Settings (Email Forwarding: None). At the bottom, a table provides a detailed view of the records:

Type	Host	Value	TTL
CNAME	www	c.storage.googleapis.com.	Automatic
TXT	@	google-site-verification=ei8HnVpN6WJg92r9P8hsV8pdmlfbPPc...	Automatic
URL Redirect	@	http://www.poolnpay.com/	Unmasked

The status bar at the bottom shows the weather as 14°C Sunny, and the system date and time as 10:34 AM 2/7/2022.



www.poolnpay.com



Thank You