Squarespace Domains

Handling the largest Domains migration, ever!





Sr Engineering Manager, Domains



Franklin Angulo

VP of Engineering, Domains

The Basics

Components of a Domain

domainsmigration.com

Second Level Domain (SLD)

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Top Level Domain (TLD)

The 4 R's of Domains



Website provider that offers domains to its website customers.

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The Announcement

June 2023

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GOOGLE / TECH / POLICY

Google sunsets Domains business and shovels it off to Squarespace



/ If your dot com or other domain is hosted by Google, they're all being sold to Squarespace. That includes 10 million domains, such as those purchased while signing up for Google Workspace subscriptions.

By Umar Shakir, a news writer fond of the electric vehicle lifestyle and things that plug in via USB-C. He spent over 15 years in IT support before joining The Verge. Jun 16, 2023, 12:22 PM EDT



Comments (24 New)

Illustration: The Verge

01 The Domains







02 The Reseller Business



03 The Landing Page

Google Domains

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Home

Manage domains

An update on domains

Google no longer offers new domain registrations, but try Squarespace

Get a new domain from Squarespace

On September 7, 2023 Squarespace acquired all domain registrations and related customer accounts from Google Domains.

Migration is underway for domains and customer accounts, and will continue over the next few months. After your domain has been migrated you'll receive email confirmation from Google, and a separate email from Squarespace Domains with domain management instructions. Learn more.

Already a Google Domains customer? Manage your current domains







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Domain provider that offers robust tools for all types of domain customers (novice to advanced).



Websites Domains provider that offers domains

to multiple types of customers

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and an API to resell domains.

From 2 to 360+ TLDs



Feature Parity

Domain forwarding

Email forwarding

DNSSEC

Glue records

More DNS record types

Internationalized domain names

Permissions

... and more



Domain-Centered Product

Dashboard	mains	Help Account Settings
C DOMAINS LIST		
Overview DNS DNS Settings Domain Nameservers Nameserver Registration DNSSEC	Franklin Angulo	
Website Email Permissions Billing	RENEWS ON ⑦ WHOIS PRIVACY ⑦ May 16, 2025 for \$20 On On Private Registration	Domain Lock ⑦ On Cock
	Registration Information EDIT Admin Billing Owner Tech Franklin Angulo 459 Broadway 5th Floor New York, NY, 10013 REQUEST TRANSFER CODE MOVE DOMAIN	



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Deal Close

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September 2023





The Countdown



Delivery Timeline Production **Reseller API** Registrar delivery to Google **Deal Close Credentials** 🛶 · 🛶 · 🕨 <hr/> 08/28 09/04 09/11 09/18 09/25 10/02 10/09 10/16 10/23 **Reseller API** Glue records SDL2 integration Ă Reseller API /events & /cancel **Key-Systems** launch 🞉 with Verisian production-ready 🎉 Launch expanded endpoints 😹 integration launch gTLDs 🎉 **Reseller API** Account dashboard **Reseller API** Account Dashboard Additional DNS pentest complete DNSSEC toggling of attributes smoke test 🞉 20 contact changes Record Types launch 🎉 Support launch **Reseller API Reseller API** pentest kicks off 🎉 test server available Reseller API Launch expanded Migration service Cloud Domains 20 ccTLD offering 👪 manual testing integration testing Frontsite Reseller API complete 🎉 **Migration service** with aolden landing changes kick off "happy paths" Email forwarding pages (v2) 🎉 payloads Escrow data code complete 😹 launch 🎉 indestion from Escrow data iob Google 🎉 SDL2 integration IronMountain iob cutover to SQSP Automated registry with PIR **Payments migration** consolidation done maintenance Launch expanded 8 from Google to window support 🎉 async ccTLDs 🎉 **Migration service** Stripe **EPP** polling with new payloads complete 🞉 code complete Updated Reseller API stub server 🞉

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The Migration Engine

Google streamed migration data to Squarespace

Google streamed individual domains to Squarespace. We built a migration-service that exposes a REST API that Google used.



Integration & Orchestration

Migrating a domain requires data creation and updates across many systems. The migration-service sits in the middle listening for Google Domains and orchestrating between systems.



Changes allowed until the last moment

The system was designed to allow customers to update their domain settings even mid migration except for a small window (~10 sec). 10 receive()
20 provision()
30 on update goto 10
40 finalize(

Migration beyond the machine

There were additional migration flows between Google and Squarespace, Google and Stripe, even Google and Google (GCP).



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Cohorts

Cohorts were a way to align with Google on a progressive migration of the customers we are most confident we are ready for.



Domain Cohorts & Eligibility

TLDs

- 🔽 PIR
- 🔽 Identity Digital
- 🔽 Google
- 🔽 GoDaddy
- 🚧 .uk, 🎯 **.us**
- 🚧 ccTLDs, 🎯 .me

Attributes

- V Multiple Domains
- **@** Multiple Payment Methods
- Given Strain Contract Str

Features

- V DNSSEC
- 🔽 Glue Records

- 🚧 Add'I DNS Record Types (🎯 SPF)
- Markspace Intermediary Console
- 🚧 Premium Domains
- 🚧 Domain Connect
- MayPal Payment Method
- Main Contributors / Permissions
- 🚧 Resold Domains
- IDNs

A Stressful Checkpoint April 2024

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The Countdown



Migration Tracker Eligible vs. Migrated

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Accumulated Migration Counter Science Eligible Domains for Migration

Migration Tracker Eligible vs. Migrated

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Accumulated Migration Counter Science Eligible Domains for Migration

Domain Eligibility (Long-Tail)

Path to ~7MM:

- V Multiple "owners"
- V gTLD / ccTLD Parity
- Google Workspace attached
- 🏫 Resold by Google Workspace
- 🏫 Resold by Google Cloud
- 🏠 Additional languages

Path to 9MM:

- V No payment information
- 🔽 Turkish Lira currency
- V Custom nameservers & >1 DS keys
- navpal payment method
- million rupee currency
- Tomain & GW with different payments
- 🏠 Expired / deleted
- Custom nameservers + forwarding
- 🍸 Ownerless
- 🏫 IDNs
- Suspended GW subscriptions
- 🍸 Abuse locks
- Transformation GW + email forwarding
- **(i)** Pending transfer out
- 🔴 Dynamic DNS
 - ACME

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Migration-Related Workstreams			Ja				Fe				м					Apr			Мау						Jun			July
	Eligibility	01-08		01-22	01-29	02-05	02-12	02-19	02-26	03-04	03-11	03-18	03-25	04-01	04-08	04-15	04-22	04-29	05-06	05-13	05-20	05-27	06-03	06-10	06-17	06-24	07-01	07-08
Migration engine validation					_	-																						
gTLD registrar support for migrated domains																												
Migration engine performance boosts to > 1 per second																												
DNSSEC for migrated domains																												
Migration engine performance boosts to > 3 per second							L L																					
Volume migrations enabled													1.1														1	
Glue records for migrated domains																											1	
Users with up to 2 domains																											1	
Users with up to 3 domains																											1	
Users with up to 4 domains																												
Users with more than 4 domains																											1	
Users with an unlimited number of domains																											1	
Domain forwarding for migrated domains													1															
Auto-renew disabled																											1	
Expiration in >= 30 days																											1	
gTLD (.love)																											1	
ccTLDs (.co.in, .in, .co.nz, io, .pl, .pw)																												
Spanish language (es-')																	-											
Currency (JPY)																												
CentralNIC gTLDs																												
ucows Realty gTLDs																												
ucows Cloud gTLDs																												
Fury gTLDs																												
GoDaddy .us ccTLDs																												
gTLDs (.me)																												
Multiple payment method support																											1	
Migration engine performance boosts to > 4 per second																												
Google] Continuous enqueuer																	L											
Premium domain renewal support																												
Add'I DNS record types (SPF only)																												
Migration engine performance boosts to > 5 per second																												
Custom name servers																												
gTLDs (.cloud)														_														
gTLDs (.realty)																												
Non-supported languages (mapped to en-US)																\sim												
Non-USD (-INR & -TRY currencies)																												
Email forwarding for migrated domains																												
[Google] Resold integration with Google Workspace																												
[Google] Resold integration with Cloud Domains																												
Domain Connect out records																												
Expiration in >= 17 days																												
Add'I DNS record types (all other except SPF)																												
Unverified domains																												
Nominet .uk ccTLD support																												
Support for contributors on a domain																						-						
Google Workspace intermediary console support																												
Resold domains support																												
Add'l ccTLD for migrated domains (usuk)																						12						
No payment information Paypal payment method support																												
Unsupported feature: INR currency																												
Custom NS & > 1 DS key records																							-		-			
Additional supported languages locales																								-				
Email forwarding plus custom name servers																												
Domain forwarding plus custom name servers																												
Expired & deleted domains																												
Domain & GW with different payments																												
[Google] Google Workspace + email forwarding																												
Unsupported feature: Dynamic DNS																												
Unsupported feature: ACME																												
DN support																												
Ownerless domains																												
Abuse locks																												
Pending transfers out																												
Expiration in < 17 days																												
																									-			
Domains with suspended Workspace subscriptions																												

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Throughput (April 3, 2024)


Domain Migrations



1 million domains in ~18 hours per day for 5 working days consuming all domains by June 3rd (9 weeks)

Road to 9+ Domains Per Second

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The migration engine needed to process much, much faster!

Avenues to Speed

- Kafka configuration
- Consumer <> partition ratio
- Batching database reads and writes
- Adding indices to databases where missing

Throughput (April 25, 2024)



Domain Migrations



6MM+ domains to go

1 million domains in ~10 hours per day for 3 working days consuming all remaining domains by May 22nd (3.5 weeks)

Week	Throughput
01/22	200 p/hour
01/29	500 p/hour
02/05	1,080 p/hour
02/12	3,600 p/hour
02/19	5,400 p/hour
02/26	10,800 p/hour
04/03	11,520 p/hour
04/12	14,400 p/hour
04/22	20,700 p/hour
04/25	32,400 p/hour 🚀

The Reseller API

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Reseller API Business

Daily Resold Domains



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Reseller API Traffic Split





Ten Months Later

Migration Tracker Eligible vs. Migrated

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Accumulated Migration Counter Digible Domains for Migration

Migration Tracker New Weekly Migrations





100%* of domains migrated successfully!

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9M+ 999.9% Reseller API SLA 360+ Supported TLDs

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