

Universal Acceptance and LAC region: Why it matters

UASG

LAC Domain Name Week | 28 April 2022



Universal Acceptance

Session Overview

Universal Acceptance (UA) Overview

- * Definition, Vision, Impact
- * Universal Acceptance Steering Group (UASG)
- * UASG Working Groups (WGs), Local Initiatives, and UA Ambassadors

Why does UA matter?

- * Social Relevance
- * Business Opportunities
- * Career Opportunities

Latin America/Caribbean Islands (LAC) Region

- * Regional information and stats
- * How UA can create impact



Universal Acceptance (UA)

To address UA, the Universal Acceptance Steering Group (UASG) was organized as a community initiative.

Vision

All domain names and email addresses work in all software applications.

Impact

Promote consumer choice, improve competition, and provide broader access to end users.

Categories Affected and UA-Readiness

Domain Names:

- New short top-level ASCII domain names: example.sky
- New long top-level ASCII domain names: example.engineering
- Internationalized Domain Names (IDNs): คน.ไทย

Email Address:

- ASCII@ASCII (new and long TLD): ekrem@misal.istanbul
- ASCII@IDN: marc@société.org
- Unicode@ASCII: 测试@example.com
- Unicode@IDN: όνομα@παράδειγμα.eu
- Unicode@IDN; right-to-left scripts: موقع.مثال@میل-ای



Accept



Validate



Process



Store



Display

UASG

- The Universal Acceptance Steering Group (UASG) was founded in February 2015 and was tasked with undertaking activities that effectively promote the Universal Acceptance of all valid domain names and email addresses.
- Main objectives:
 - ✓ Raise awareness of the issue among relevant stakeholders.
 - ✓ Help developers make their systems UA-ready by providing documentation and getting common standards, technology, and tools UA compliant.
 - ✓ Encourage businesses and governments to ask their developers and suppliers to provide UA-ready solutions for the benefit of end users.
 - ✓ Measure progress on UA-readiness.

UASG Working Groups

UASG WG	Role
Technology WG	Oversees remediation work on standards, programming languages, tools, and development platforms.
Email Address Internationalization (EAI) WG	Oversees engagement with email software and service providers to make them EAI-ready.
Measurements WG	Identify UA-readiness gaps in tools and technologies.
Communications WG	Develop communication strategy and oversees its execution in collaboration with other working groups.
Local Initiatives WG	Conduct national and regional UA awareness, training, and stakeholder engagements.
UA Ambassadors	Organize training and outreach at national and regional levels.

Universal Acceptance Local Initiatives

Aim is to interact with local stakeholders to promote UA-readiness through:

- Local community outreach and engagement
- Technical training

Active Local Initiatives

- China
- Commonwealth of Independent States and Eastern Europe (CIS-EE):
Armenia, Belarus, Georgia, Latvia, Russia, Serbia, Ukraine
- India
- Thailand

Help us establish new UA Local Initiatives :

[Use the Local Initiative Charter](#) and proposal template available on uasg.tech.

Please contact us at info@uasg.tech if you are interested in starting one in your country or region.

Why does UA matter?



UA Enables Digital Inclusivity

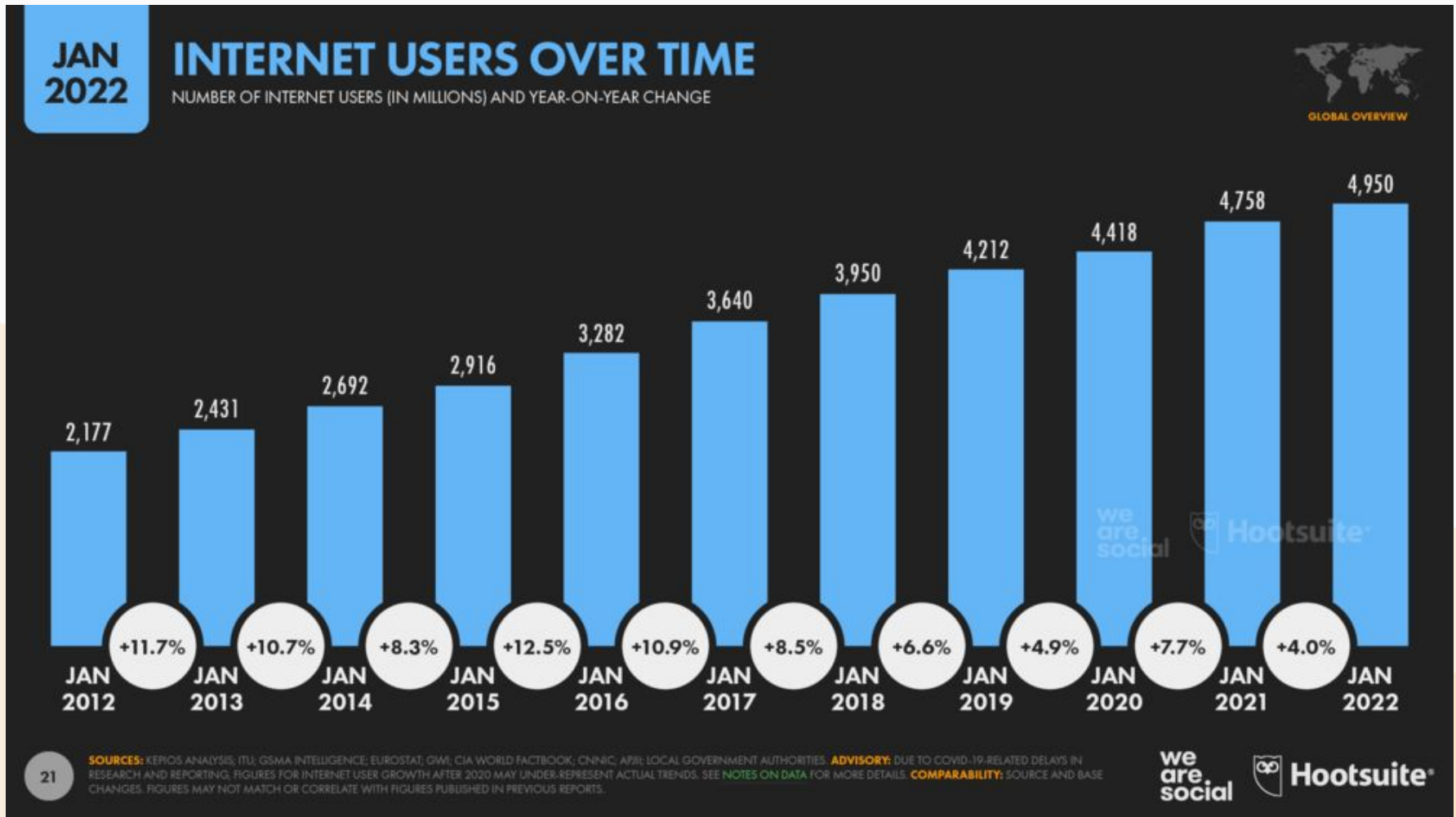
*Consumer Choice

*Digital Inclusivity

*Multilingual Internet

- There are now more than 1,200 active gTLDs, as well as country code top-level domains (ccTLDs) that are available in different scripts and that may be longer than three characters. These new TLDs represent cultures, brands, geographies, and special interests (e.g. .ไทย, .LONDON, .SPORT).
- Today, the Internet population is 4.5 billion active users, and at least one billion more are expected to come online by 2023. Through Universal Acceptance (UA), they will experience the full benefits of the Internet.
- The majority of the world does not speak English as a first language. In fact, only more than a third of the world population uses the Latin alphabet in English, while there are billions of people who prefer to read and write in Arabic, Chinese, Cyrillic, Devanagari, or other scripts.

Internet Users Over Time



UA Provides Business Opportunities

- * Competitive Advantage
- * 9.8+ Billion Opportunity
- * Reduce Technical Debt
- * Social Responsibility
- * Serve Local/Global Audiences

- Many businesses are leaving money on the table by not updating their systems to be UA-ready, which has the potential to unlock billions in revenue from untapped customers.
- A UASG study, conducted in 2017, found that the Universal Acceptance of domain names is a \$9.8+ billion opportunity, which is a conservative estimate.
- Businesses that support customers with UA -ready systems will have a first-mover advantage and the potential to capture new increasing revenue streams.
- The investment to update systems is far outweighed by the revenue potential from becoming UA-ready.

UA Delivers Career Opportunities

* Competitive Differentiator * Skill Development * Global User Experience

- A strong understanding of UA is the new competitive differentiator every developer should have in their skill set.
- Becoming proficient in UA does not require learning a new category of coding, but rather builds upon existing skill sets to expand systems to recognize and support URLs and email addresses in all character lengths, and scripts.
- <https://uasg.tech/> offers many resources, guides and training for Technology developers and systems administrators to become proficient in UA.
- UA-readiness requires a considerable effort by all of us.
Start with testing your own systems and email addresses.
<https://uasg.tech/eai-check/> ; [UASG004](#); [UASG026](#)

UA Training Series

LACRALO and NARALO UA Training Programs

Date	Session	Audience	Description
20 January 2022 12:00 PM EST 17:00 PM UTC	Introduction to UA	General	An introduction to the fundamentals of UA and EAI.
27 January 2022 12:00 PM EST 17:00 PM UTC	EAI Configuration	Technical (email and system administrators)	A detailed training on how to configure email systems to support EAI.
3 February 2022 12:00 PM EST 17:00 PM UTC	UA for Java Software and Application Developers	Technical (software and application developers)	A detailed training on how to design and develop applications and systems to support UA.
10 February 2022 12:00 PM EST 17:00 PM UTC	Outreach and Engagement: The Life of a UA Ambassador	General	A session to discuss how participants can stay involved in UA efforts across the NA region.

<https://www.icann.org/resources/pages/regional-universal-acceptance-training-2021-01-06-en>

ICANN Learn Course <https://learn.icann.org>



Let us know if you would like to volunteer as a UA technical trainer:

info@uasg.tech

Latin America/Caribbean Islands (LAC) Region and How UA can Impact



Latin America/Caribbean Islands (LAC) Region

- 37 Countries or Territories/ ccTLDs
- 655 million people, 27% of whom do not use the internet
- Majority of the languages are Spanish, Portuguese and English
- No IDN ccTLD in the LAC region, but there are special characters in domain name registrations at the second level.

.br domains registered so far

4,935,662

.br DOMAINS

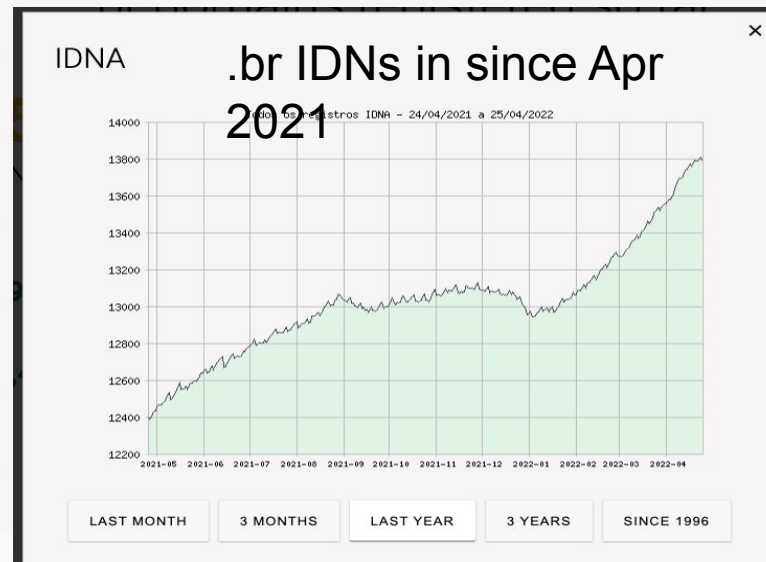
04/26/2022

IDNA **13,792**

» see evolution

DNSSEC **1,483,394**

» see evolution



JAN 2022

UNCONNECTED POPULATIONS

NUMBER OF PEOPLE (IN MILLIONS) WHO DO NOT USE THE INTERNET



32

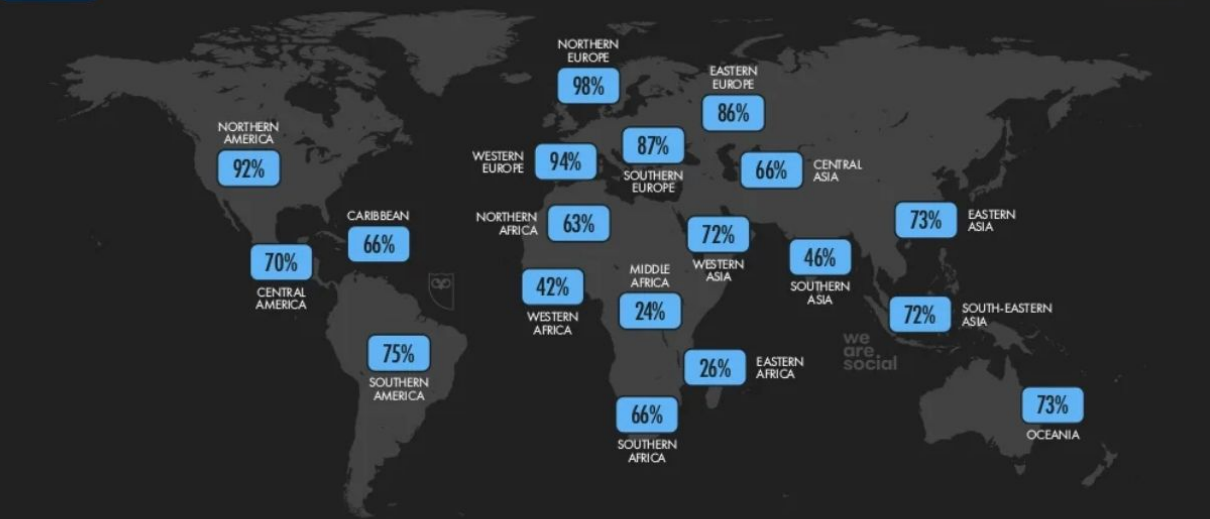
SOURCES: KEPIS ANALYSIS, ITR, OSMA INTELLIGENCE, EUROSTAT, GWE, CIA WORLD FACTBOOK, CNNIC, APRI, LOCAL GOVERNMENT AUTHORITIES, UNITED NATIONS. NOTE: REGIONS BASED ON THE UNITED NATIONS GEOScheme. COMPARABILITY: SOURCE AND BASE CHANGES.



JAN 2022

INTERNET ADOPTION

INTERNET USERS AS A PERCENTAGE OF TOTAL POPULATION



22

SOURCES: KEPIS ANALYSIS, ITR, OSMA INTELLIGENCE, EUROSTAT, GWE, CIA WORLD FACTBOOK, CNNIC, APRI, LOCAL GOVERNMENT AUTHORITIES, UNITED NATIONS. NOTE: REGIONS BASED ON THE UNITED NATIONS GEOScheme. COMPARABILITY: SOURCE AND BASE CHANGES.



IDN Registration in the LAC Region

- Survey conducted in Jan 2020 by the LACRALO WG on Multilingualism and IDNs.
- The **SLD (Second Level Domain)** support test for Ñ, Tilde (´) and Cedilla (Ç) characters was carried out through the **Domain Query Section usually found at ccTLDs official websites**. The following domain names were used:

www.compañerosunidos.xx

www.corazón.xx

www.coraÇon.xx

- 13 out of 23 ccTLDs from the LAC region which represents about 56% of the total of countries being analyzed, do not support the characters Ñ, (´), and Ç.
- Only 13% supports diacritic characters and the letters Ñ and ç in registrations.

The potential for Internet penetration is in Asia, the Pacific area, Africa and Latin America, where English is not the main language. In order for IDNs to fully develop their potential, different stakeholders must introduce changes to speed universal acceptance so that IDNs may be seamlessly used in any environment.

UA Status Report



Measuring UA Progress

The Universal Acceptance Steering Group (UASG) continues to publish reports related to UA testing and evaluation, remediation, general information, and more.

2021

EAI: A Technical Perspective (UASG018B)

Results of an informal survey of mail servers across domains registered in hundreds of top-level domains (TLDs) to see whether they have mail servers that accept EAI mail.

Evaluation of EAI Support in Email Software and Services (UASG030)

Tests the different components of the email technology stack, the Mail User Agent (MUA), Mail Submission Agent (MSA), Mail Transfer Agent (MTA), Mail Delivery Agent (MDA), and Mail Service Provider (MSP) of different software packages.

FAQs: UA-Readiness of Programming Languages and Tools (UASG031)

Provides answers to Frequently Asked Questions (FAQs) regarding UA support in programming languages and frameworks, and support for EAI in email tools and services.

UA of Content Management Systems (CMS) Phase 1 – WordPress (UASG032)

Tests the UA-readiness of CMS, namely WordPress and its associated plugins.

Measuring UA Progress

2021 (continued)

UA-Readiness of Open Source Code Pilot (UASG033)

An evaluation of the strategies to be used to discover and improve UA associated code in open source software.

2022

UA-Readiness of Social Media Platforms (UASG035)

UA-readiness evaluation of the most popular social media applications used worldwide.

UA-Readiness of Browsers (UASG036)

Updated UA-readiness evaluation of widely used browsers that now includes bookmark and favorites testing.

UA-Readiness of Some Programming Language Libraries and Frameworks (UASG 037) UA-readiness evaluation of of programming languages to include mobile platforms as well.

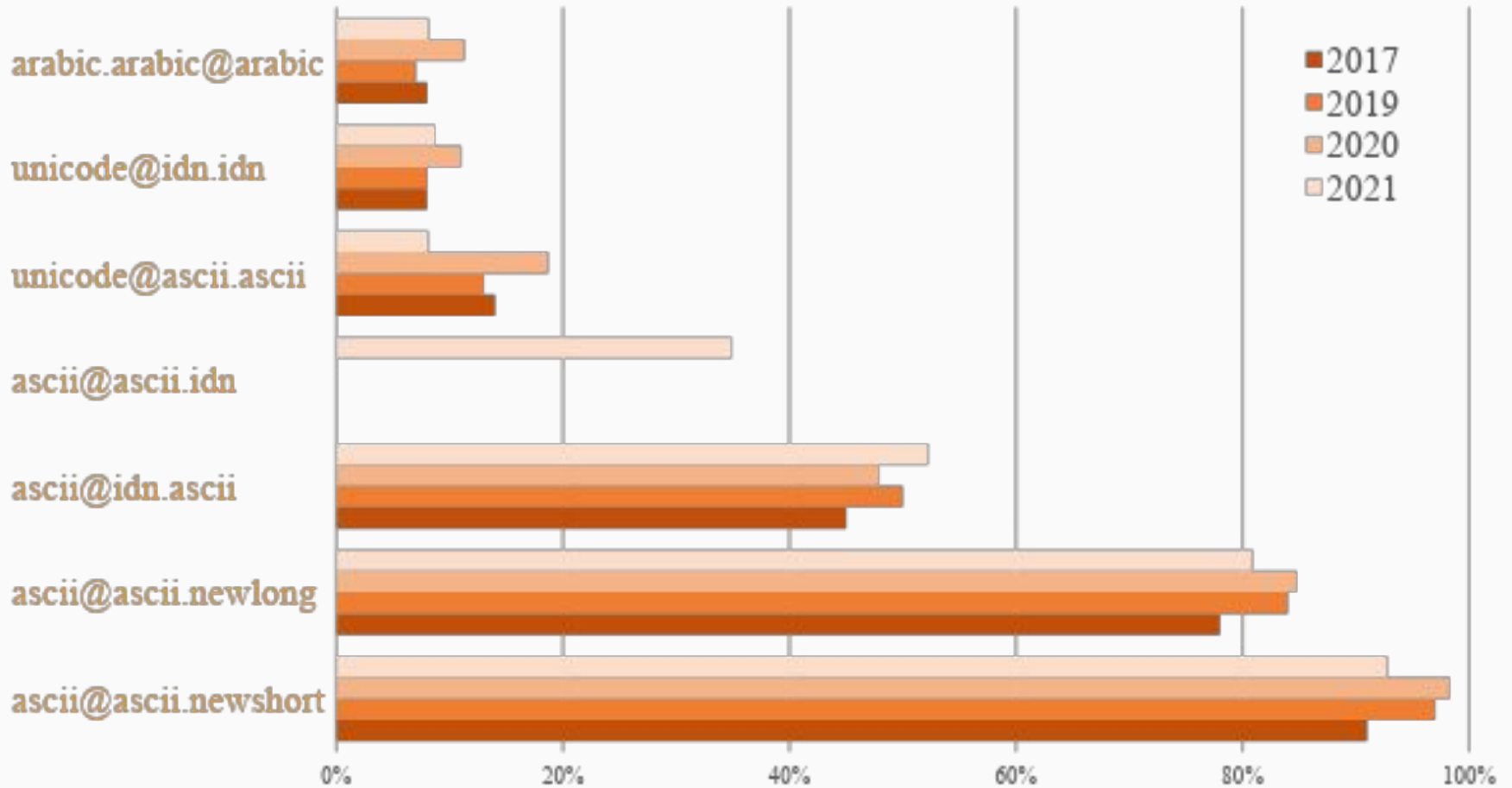
Evaluation of Websites & Remediation

Year	Websites Tested	Scope	Report
2021 Dec	2,010	UA Test and Outreach	To be published on uasg.tech
2020 Apr	1,000	UA Test	UASG027
2019 Aug	1,000	UA Test	UASG025
2017 Sep	750	UA Test	UASG017

- * This is the first time we are conducting outreach to website owners to report UA issues so that they can be addressed.
- * The feedback to website owners is provided via multiple channels with multiple contacts.
- * The follow-up with website owners will continue until June 2022.
- * Given that there has been limited progress over time, we are exploring additional interventions.

Email Acceptance of Top Websites Globally

EAI Acceptance Rates 2017-2021



UA-Readiness of Deployed Mail Servers

To measure how widely internationalized email addresses are accepted, quarterly surveys of email servers across domains registered in hundreds of TLDs are being conducted.

1,180

TLD zones



210,811,274

second level domains

34,996,159

unique mail servers

2,537,159

unique IP addresses

Tested IP Addresses



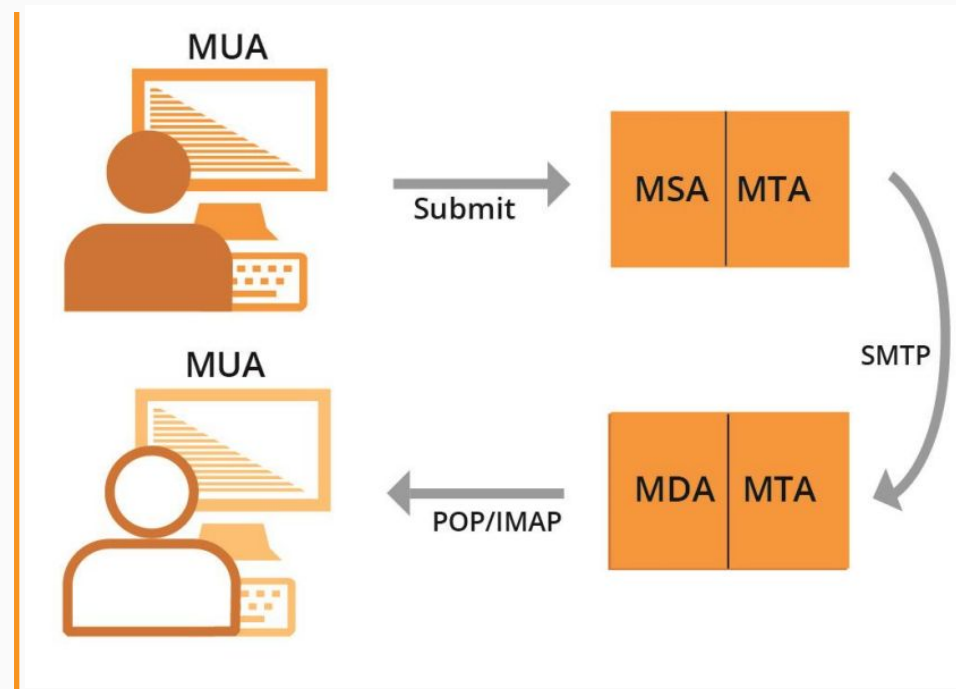
Test your email server for EAI support: <https://uasg.tech/eai-check/>

Scope for UA-Readiness: Email Specific Systems

All email agents must be configured to send and receive internationalized email addresses.

See [EAI: A Technical Overview](#) for details.

- * MUA – Mail User Agent
- * MSA – Mail Submission Agent
- * MTA – Mail Transfer Agent
- * MDA – Mail Delivery Agent



- * **Level 1: L1** if tool can only send to or receive from an EAI address
- * **Level 2: L2** if tool can also create an EAI address

UA-Readiness: Email Specific Systems

Details in [UASG030A](#)

Name	MUA	MSA	MTA	MDA	MSP	Webmail
Coremail	Few	All L2	Most L2	Few	All L2	Most L2
MS Outlook.com	Most L1	Most L1	Most L1	None	None	Most L1
Yandex Mail	Few	None	None	Few	Part L1	Few
Roundcube	Most L2					
Apple Mail	Few					
Apple iOS Mail 14.x	L2					
Mozilla Thunderbird	Few					
MS Outlook	Most L1					
MS Exchange Server (hosted)		All L1	All L1	Few		
Exim		Most L2	All L2			
Postfix		All L2	All L2			
Courier		All L2	All L2	All L2		
Gmail	All L1	All L1	All L1	Few		
XgenPlus		Most L2	Most L2	Most	All L2	Most L2
Sendmail 8.17 Alpha		Most L2	Most L2			
Halon		Most L2	Most L2			
Thunderbird 89 beta	Most L1					
Dovecot				None*		

UA-Readiness of Spam Filters

- * UA-readiness test determined how well the chosen software packages and spam filters support internationalized email.
- * While EAI support is improving every year, there is still plenty of work to do.

Details in [UASG030A](#)

Spam Filters	EAI Support
Spamassassin 3.4.5	All L2
Mailchannels	Part L1
Spamjadoo (Xgenplus)	All L2

- * **Level 1: L1** if tool can only send to or receive from an EAI address
- * **Level 2: L2** if tool can also create an EAI address

Evaluation of Content Management Systems (CMS)

The UA-readiness of Content Management Systems, namely WordPress and its associated plugins under multiple extensions, were tested with various categories of email addresses and domain names.

Observations:

- * **Domain Names:** In most cases, IDNs generally worked well for end-to-end, but failed some tests (e.g., the A-label is stored instead of U-label in the database).
- * **Emails:** While various categories of ASCII email addresses work well in WordPress, it is not EAI compatible.



Content Management Systems – Wordpress – Domains

Extension	Plugin Name	IDN UA Readiness
CMS	WordPress Instance	B-Level
Extension 1 Subscription Management	MailChimp	B-Level
	Mailster	C-Level
	OptinMonster	B-Level
	Newsletter	B-Level
	Sumo List Builder	C-Level
Extension 2 Membership Management	MemberPress	B-Level
	WooCommerce	B-Level
	Restrict Content Pro	B-Level
	Paid Memberships Pro	B-Level
	S2Member	C-Level
Extension 3 Event Management	Events Manager	B-Level
	WP Event Manager	C-Level
	Event Organiser	B-Level
	All - in - One Event Calendar	B-Level
	Event Espresso 4 Decaf	B-Level

Details in [UASG032](#)

A-level: All passed

B-Level: End-to-end works, but some tests failed

C-Level: End-to-end testing failed



Content Management Systems - Wordpress – Emails

Details in [UASG032](#)

Extension	Plugin Name	Categories					
		ascii@ascii.ascii 1	ascii@idn.idn 2	unicode@idn.idn 3	unicode@RTL.RTL 4	ascii@RTL.RTL 5	ascii@punycode.punycode 6
CMS	WordPress Instance	A-Level	A-Level	C-Level	C-Level	A-Level	A-Level
Extension 1 Subscription Management	MailChimp	B-Level	C-Level	C-Level	C-Level	C-Level	C-Level
	Mailster	A-Level	A-Level	C-Level	C-Level	A-Level	A-Level
	OptinMonster	B-Level	C-Level	C-Level	C-Level	C-Level	C-Level
	Newsletter	A-Level	A-Level	C-Level	C-Level	A-Level	A-Level
	Sumo List Builder	B-Level	C-Level	C-Level	C-Level	C-Level	B-Level
Extension 2 Membership Management	MemberPress	A-Level	A-Level	C-Level	C-Level	A-Level	A-Level
	WooCommerce	A-Level	A-Level	C-Level	C-Level	A-Level	C-Level
	Restrict Content Pro	A-Level	C-Level	C-Level	C-Level	C-Level	A-Level
	Paid Memberships Pro	A-Level	A-Level	C-Level	C-Level	A-Level	C-Level
	S2Member	A-Level	A-Level	C-Level	C-Level	A-Level	C-Level
Extension 3 Event Management	Events Manager	A-Level	C-Level	C-Level	C-Level	C-Level	A-Level
	WP Event Manager	A-Level	C-Level	C-Level	C-Level	C-Level	A-Level
	Event Organiser	A-Level	A-Level	C-Level	C-Level	A-Level	C-Level
	All - in - One Event Calendar	A-Level	A-Level	C-Level	C-Level	A-Level	C-Level
	Event Espresso 4 Decaf	A-Level	C-Level	C-Level	C-Level	C-Level	A-Level

Caveats and Conclusions About Browsers

We looked at the UA-readiness of browsers on both desktop and mobile platforms.

The general outlook for the UA-readiness of modern web browsers is largely positive on desktop platforms.

One area of improvement for browser vendors is the handling of bookmarking for IDNs. A number of vendors listed previously stored bookmarks using Punycode conversions which have little or no significance to the reader.



UA-Readiness of Browsers

Light green represents the most successful browsers in terms of UA-readiness.

	360	Amigo Mail	Atom Mail	Chrome	Edge	Epic Privacy Bro	Firefox	Internet Explorer
Windows			1st	3rd	7th	3rd	6th	
Mac OS				2nd	5th	6th	3rd	
Linux				2nd			1st	
Android				3rd	6th	2nd	4th	
IOS				2nd	6th	4th	3rd	

	Opera	Safari	Samsung Brows	Sogou	UC Browser	Yandex
Windows	4th			5th		2nd
Mac OS	4th	4th				1st
Linux	2nd					
Android	2nd		5th		7th	1st
IOS	5th	2nd				1st

* Yandex and Chrome score highly across all platforms.

Details in [UASG036](#)

UA-Readiness of Browsers: Desktop vs. Mobile Device

	Passed all tests	Failed tests:
Windows	86	66
Mac OS	42	91
Linux	9	48
Android	48	104
IOS	31	102

- * There were more UA difficulties with mobile device environments.

- * Most failures were due to the following tests:

- /// ❄ ❄ ❄ * Confirm that the URL display is in the correct format as added.
- * Confirm that the URL is displayed correctly in the bar.

Details in [UASG036](#)

Evaluation of Social Media Platforms

UA-readiness of social media platforms were tested for:

- * Registration and authentication of email address with chosen social media platform.
 - * Changing the user's email address attached to the profile.
 - * Posting content with various categories of domain names.
- /// ✨ ✨ //
- * Posting content: Strong support for display and navigation of internationalized email addresses and domains across most social media platforms.

UA-Readiness of Social Media Platforms - Registration and Authentication

No social media platform supports registration using a non-ASCII email address. This is shown in the chart as being **RED**.

Unsurprising due to lack of support and/or adoption of internationalized emails in the email transport systems and clients.

Test Part 1: Can the user can register onto the social media application, log in and use the social media application with a non-ASCII email address?									
	Baidu Teiba	Dou Yin	Facebook	Facebook Messenger	Instagram	Line	Linkedin	Odnoklassniki	QQ (Tencent)
Mac Chrome	[Red]								
Windows Chrome									
Android App									
iOS App									

	QZone	Sina Weibo	Snapchat	Telegram	Tik Tok	Twitter	Vkontakte	Wechat	Whatsapp	Youtube
Mac Chrome	[Red]									
Windows Chrome										
Android App										
iOS App										

Details in [UASG035](#)

UA-Readiness of Social Media Platforms

- * Tested the posting and messaging of non-ASCII URLs and whether the URLs behaved how the end user would expect (whether they came up as a hyperlink and connected to the correct URL).
- * Telegram scored highest with LinkedIn, Facebook, and Twitter coming in second and third.

Legend

Highest success rate	Second highest success rate	Third highest success rate	Fourth highest success rate	Fifth highest success rate	Last or no success
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	Facebook	Facebook Messen	Instagram	Line	Linkedin	Odnoklassniki	QQ (Tencent)	Sina Weibo
Mac Chrome	Second highest	Third highest	Second highest	Fourth highest	Second highest	Last or no success	Fourth highest	Last or no success
Windows Chrome	Second highest	Third highest	Second highest	Fourth highest	Second highest	Last or no success	Fourth highest	Last or no success
Android App	Second highest	Third highest	Second highest	Fourth highest	Second highest	Last or no success	Fourth highest	Last or no success
iOS App	Second highest	Third highest	Second highest	Fourth highest	Second highest	Last or no success	Fourth highest	Last or no success

	Snapchat	Telegram	Tik Tok	Twitter	Vkontakte	Wechat	Whatsapp	Youtube
Mac Chrome	Fourth highest	Second highest	Third highest	Second highest	Last or no success	Fourth highest	Last or no success	Last or no success
Windows Chrome	Fourth highest	Second highest	Third highest	Second highest	Last or no success	Fourth highest	Last or no success	Last or no success
Android App	Fourth highest	Second highest	Third highest	Second highest	Last or no success	Fourth highest	Last or no success	Last or no success
iOS App	Fourth highest	Second highest	Third highest	Second highest	Last or no success	Fourth highest	Last or no success	Last or no success

Details in [UASG035](#)

Summary of Programming Language Evaluation – Phase 1 and 2

The work consisted of testing the UA-readiness levels of several programming languages, frameworks, and libraries and comparing the results over time.

- * Various categories of domain names and email addresses were tested.
- * Most libraries and frameworks from the previous phase were not improved for the purpose of Universal Acceptance.
- * Many of the new tested libraries have partial support, whereas the others provide full support for IDNA2008 and EAI.

Programming Languages and Frameworks

LANGUAGE	LIB NAME	COMPLIANCE (%)	Type
Javascript	Idna-Uts46	85.5	IDN
Javascript	Nodemailer	84.3	Mail
Javascript	Validator	94.2	Mail
Python3	Django_Auth	48.1	Mail
Python3	Email_Validator	86.3	Mail
Python3	Encodings_Idna	67.7	IDN
Python3	<u>Idna</u>	100	IDN
Python3	<u>Smtplib</u>	84.3	Mail
Rust	<u>Idna</u>	87.1	IDN
Rust	<u>Lettre</u>	7.8	Mail

Legend

UA-ready

UA-ready but
developer needs to
be careful

Not UA-ready

Programing Languages and Frameworks

LANGUAGE	LIB NAME	COMPLIANCE (%)	Type
C	Libcurl	84.3	Mail
C	Libidn2	95.2	IDN
C#	Mailkit	84.3	Mail
C#	Microsoft	83.9	IDN
Go	Mail	100	Mail
Go	<u>Idna</u>	79	IDN
Go	Smtplib	19.6	Mail
Java	Commons-Validator	85.5	Mail, IDN
Java	Guava	77.8	IDN
Java	ICU	93.5	IDN
Java	Jakarta-mail	82.4	Mail
Java	JRE	71	IDN

Legend

UA-ready

UA-ready but
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Not UA-ready

Summary of Programming Language Evaluation - Phase 3

This phase extends the testing of UA-readiness levels of programming languages to include mobile platforms as well.

- * iOS: While native iOS apps (Safari, Mail) demonstrated good compliance with EAI and IDNA2008, Apple doesn't provide libraries with the same level of acceptance for developer tools.
- * Android: The base code for HTTP on Android is IDNA2003 compliant only; consequently, none of the tested libraries are IDNA2008 compliant.
- * PHP on Windows and Linux: UA compliance is generally good. However, while Microsoft supports IDNA2008 in its core .NET framework, older Windows API that may be used by PHP libraries did not get support for IDNA2008; therefore, those libraries are not UA-compliant.

Programming Languages and Frameworks For Mobile Platforms

LANGUAGE	LIB NAME	PLATFORM
Swift	MessageUI	iOS
Swift	NSURLSession	iOS
Swift	Alamofire	iOS
Swift	IDNA-Cocoa	iOS
Kotlin	okHttp	Android
Kotlin	URLConnection	Android
Kotlin	Retrofit	Android
Kotlin	fuel	Android
Kotlin	Volley	Android
Kotlin	Apache HttpClient	Android
Kotlin	Jakarta Mail	Android
Kotlin	Email Intent	Android

Legend -

UA-ready

UA-ready but
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Not UA-ready

Programming Languages and Frameworks

LANGUAGE	LIB NAME	Platform
PHP	cURL*	Windows
		Linux
PHP	mail	Windows
PHP	emailValidator	Windows & Linux
PHP	Guzzle	Windows & Linux
PHP	intl	Windows & Linux
PHP	PHPMailer	Windows & Linux
PHP	Symfony	Http-client
		Polyfill-intl-idn
		Mailer

Legend -


UA-ready

UA-ready but
developer needs to
be careful

Not UA-ready

Remediation of Programming Languages

As part of Phase 3 testing:

- * 15 bug reports
- * 4 code fixes have been submitted
 - * 3 merged upstream by the maintainers
 - * 1 pending to be merged upstream
- * Provided code examples demonstrating how to properly support UA in the form of a patch in a pull request.
- * Providing code patches significantly increases the likelihood of a fix to be included in the source code.
-  * Demonstration of both technical competency on the issue (i.e., UA) and on the software being patched provides a greater chance of being answered.

Remediation of Programming Languages

Language	Platform	Library	Resolution
Swift	iOS	MessageUI	No answer yet
Swift	iOS	URLSession & Alamofire	Being discussed and maintainer assigned to the issue
PHP	Windows	mail	This does not claim to support RFC6531, this would be a new feature
PHP	Windows	cURL	This is a Windows issue
PHP	Windows & Linux	intl	This is an ICU issue
PHP	Windows & Linux	PHP Mailer	Fix submitted and merged upstream
PHP	Windows & Linux	Symfony HttpClient	Fix submitted and merged upstream
PHP	Windows & Linux	Symfony Mailer	3 different bug reports: <ul style="list-style-type: none">• Fix submitted and merged upstream• Being discussed• No answer yet
Kotlin	Android	Jakarta Mail	No answer yet
Kotlin	Android	URLConnection	Transmitted to the engineering teams
Kotlin	Android	OkHttp	Closed after Q&A as IDNA 2008 is not uniformly supported or implemented by clients and servers
Kotlin	Android	Fuel	Fix submitted and pending to be merged upstream
Kotlin	Android	Apache HttpClient	No answer yet

UASG on Social Media

Contact us if you would like to collaborate.

Follow the UASG on its social channels:



<https://twitter.com/UASGTech>



<https://www.facebook.com/uasgtech/>



<https://www.linkedin.com/company/uasgtech/>



<https://www.youtube.com/channel/UCsZQcTPv4Q2TRdx4w7V1ouw>

Q&A

Follow, share, like, and engage with the UASG on social media, and use the UASG hashtag in relevant posts: [#Internet4All](#)

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спасибо 谢谢
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THANK YOU

ありがとうございました MERCI

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