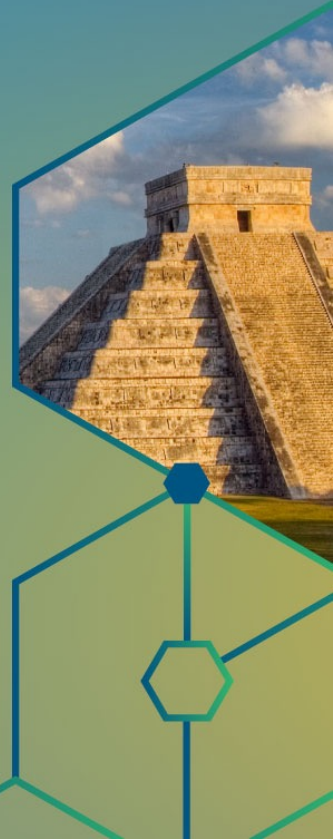


I C A N N
COMMUNITY FORUM

76

CANCÚN

11-16 March 2023



Universal Acceptance Community Update

ICANN76 Prep Week | 28 February 2023
Universal Acceptance Steering Group (UASG)



Session Overview

Universal Acceptance (UA) Overview

Updates from the UASG

- Inaugural UA Day
- 2023 UASG Elections
- Overview of UA Sessions at ICANN76

Updates from UA Working Groups

- Measurement WG
- Technology WG
- Email Address Internationalization (EAI) WG
- Communications WG

Question and Answer (Q&A)

Universal Acceptance (UA)

UA Vision

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

Impact

UA provides the gateway to the next billion Internet users.

UA promotes consumer choice, improves competition, and provides broader access to end users.

The Universal Acceptance Steering Group (UASG) was formed in 2015 as a community initiative to address UA, and advocate and encourage relevant stakeholders to make their systems and applications UA-ready.

UA Scope and Categories Impacted

1) Domain Names (including Internationalized 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

2) Email Addresses (including Email Address Internationalization):

- ASCII@ASCII (new and long TLD): ekrem@misal.istanbul
- ASCII@IDN: marc@soci      .org
- Unicode@ASCII:       @example.com
- Unicode@IDN:       @      .      
- Unicode@IDN; right-to-left scripts:       @      .      



Accept



Validate



Process



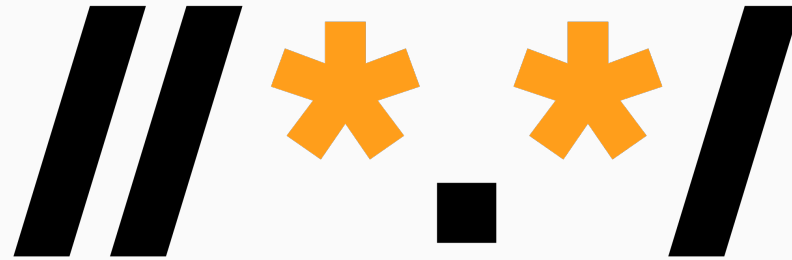
Store



Display

UASG Working Groups (WG)

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.
Measurement WG	Identifies UA-readiness gaps in tools and technologies.
Communications WG	Develops communication strategy and oversees its execution in collaboration with other working groups.
Local Initiatives WG	Conducts national and regional UA awareness, training, and stakeholder engagements.
UA Ambassadors	Organizes training and outreach at national and regional levels.



Universal Acceptance

UA Day
#Internet4All

28 March 2023

<https://UniversalAcceptance.day>

Objectives of UA Day

In order to mobilize the technical community to become UA-ready, UA Day aims to rally local, national, regional, and global organizations to create a “buzz” around adopting UA.

- Share UA challenges and current gaps in UA.
- Drive UA adoption in all software, systems, and devices developed by local, regional, and global technical orgs.
- Motivate technical and government decisionmakers to adopt UA (by updating procurement terms to include UA-readiness, etc.)
- Create UA awareness in the technical community especially around UA challenges and solutions.
- Rally language communities to enable policies to promote UA adoption.
- Celebrate the achievements of UA and recognize success stories.

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UA Day Proposals Received

A total of 89 proposals for local/national and regional UA Day events received by 31 January 2023.

Region	Proposals
Africa	32
Asia Pacific	41
Europe	2
Latin America and Caribbean	12
North America	2

- ◉ Global UA Day event to be held in India on 28 March.
 - ◉ Hosted by Internet Exchange of India (NIXI), also the manager for India's IDN and ASCII ccTLDs.
 - ◉ ICANN Executives and Board members planning to attend.

UA Day Event calendar will be available soon on <https://universalacceptance.day/>.

Shortlist of UA Day Proposals

Around 50 proposals have been shortlisted from 40+ countries.
(Shaded cells represent regional events.)

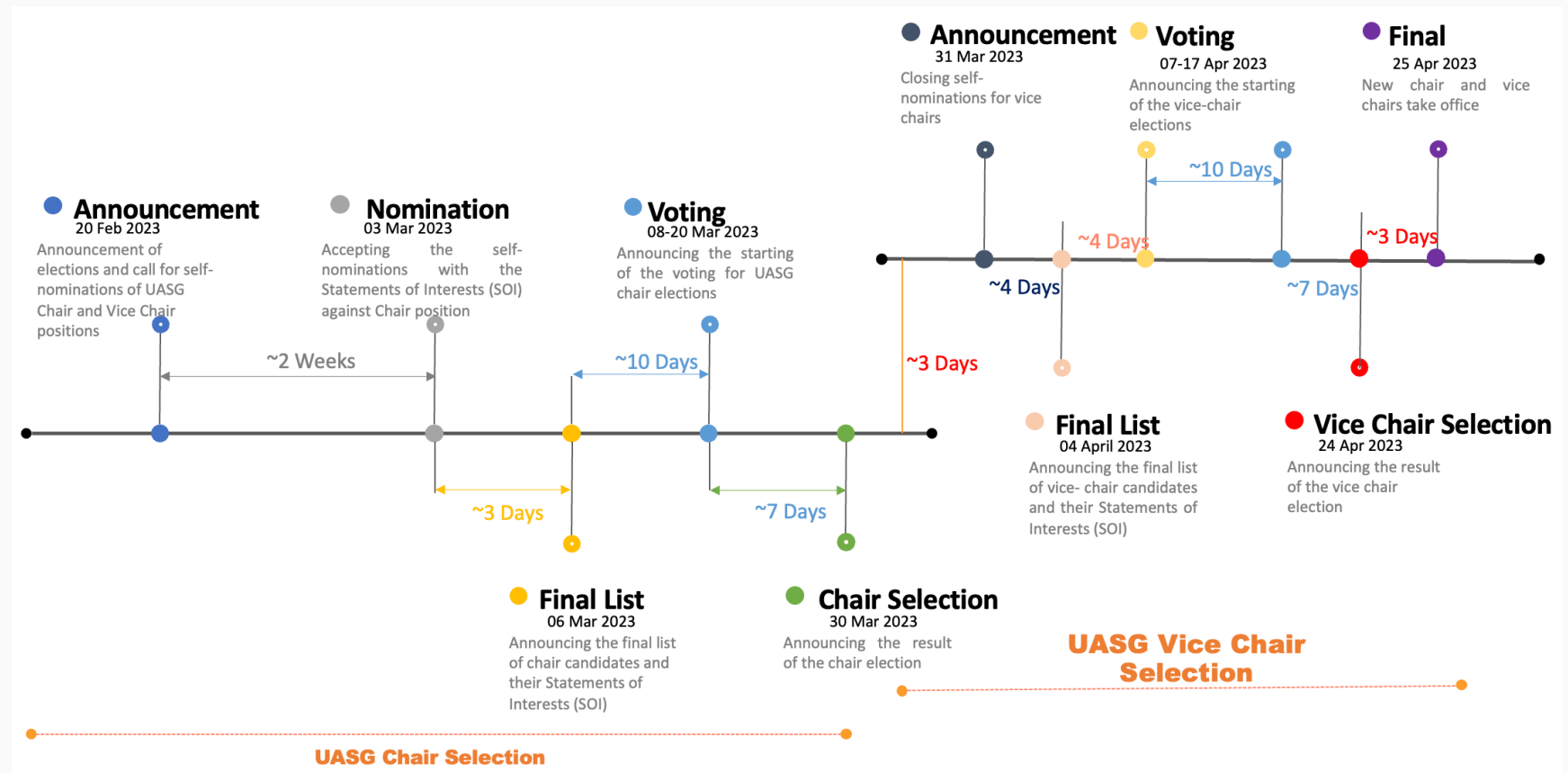
AF	APAC	LAC	NA	EU
Benin	Armenia	Bolivia	Canada	Austria, Germany, Liechtenstein, Switzerland
Cameroon	Bangladesh	Brazil	USA	
Central African Republic	China	Brazil		
Chad	China	Ecuador		
Egypt	Hong Kong	El Salvador		
Ghana	India	Grenada		
Kenya	Laos	Guadeloupe - French Caribbean		
Liberia	Malaysia	Mexico		
Libya	Middle East	Nicaragua		
Malawi	Myanmar	Trinidad and Tobago		
Morocco	Nepal			
Niger	Pakistan			
Nigeria	Papua New Guinea			
Rwanda	Samoa			
Sierra	Sri Lanka			
Tanzania	Thailand			
Tunisia	Türkiye			
Uganda				

Join a UA Day event near you!

UASG Chair and Vice Chair Elections

The UASG Chair and Vice-Chair elections are held every two years. The UASG is accepting self nominations through the ua-discuss mailing list on the following days:

- 20 February – 3 March 2023 for Chair Election
- 20 February – 31 March 2023 for Vice-Chair Election



ICANN76 UA-Related Sessions

1. Sat. 11 March Engagement with GNSO at ISPCP Membership Meeting
2. Sun. 12 March At-Large Outreach and Engagement (UA Day 2023)
3. Mon. 13 March (Tech Day) Demo of Internationalized Web Hosting and Email Tools
4. Tue. 14 March ICANN Fellows and NextGen: Focus on Universal Acceptance
5. Tue. 14 March Promoting UA through Local Engagement
6. Wed. 15 March Universal Acceptance: New Internationalized Email Self Certification Guide Overview

Updates from UA Working Groups (WGs)

UA Measurement WG

UA Measurement WG

- The UA Measurement WG plans, oversees, and directs the gap analysis efforts of the UASG for various frameworks and technologies and reports on UA-readiness progress.
- **Published:**
 - [UASG042](#) UA-Readiness of Web Hosting Tools (cPanel, Plesk, ISPConfig)
- **Ongoing Tasks:**
 - UA Readiness of Popular Identity Platforms (Okta, Auth0, OpenIAM)
 - UA Readiness of e-Commerce Platforms
 - UA Curriculum for the Academia (Join ICANN76 session on [Promoting Universal Acceptance \(UA\) through Local Engagement](#))
 - Whitepaper to persuade the developers that changing from IDNA2003 to IDNA2008 is not a big deal

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UA-Readiness of Popular Web Hosting Tools UASG 042

Objective:

- * The purpose of this project is to determine to what extent web hosting tools cPanel, Plesk, and ISPConfig offer the capacity for customers to build websites and host emails in accordance with Universal Acceptance.

Initial results:

- * None of the web hosting tools (cPanel, Plesk and ISPConfig) are in compliance.
- * Plesk has the highest chance of providing a full native script experience.
- * ISPConfig has the advantage of being an open-source web hosting tool and allows making ad hoc changes.

Test Results: Overall Test Scenario Status

(UASG042)

Web Hosting Tool	OS	Web Server version	Email Server	Database	UTF-8 environment	Access	Domain Name activation and management	Email Service	Database	Webhosting
cPanel 104.0.7	Rocky Linux 8.6 (Green Obsidian)	Apache 2.4.54	Exim 4.95	MySQL 8.0.29	W	F	F	F	F	A
	Ubuntu 20.04 LTS	Apache 2.4.54	Exim 4.95	MySQL 8.0.29	W	F	F	F	F	A
	CentOS Linux 7 (Core)	Apache 2.4.54	Exim 4.95	MySQL 5.7.38	W	F	F	F	F	A
Plesk Obsidian Web Host Edition Version 18.0.45	AlmaLinux 8.6 (Sky Tiger)	Apache 2.4.37 nginx 1.20.2	Postfix 3.5.14	MariaDB 10.3-32	W	F	F	F	F	A
					W	F	F	F	F	A
	Debian GNU/Linux 11 (bullseye)	Apache 2.4.37 nginx 1.20.2	Postfix 3.5.13	MariaDB 10.5-15 PostgreSQL 13.7	W	F	F	F	F	A
					W	F	F	F	F	A
	Windows 10	Microsoft IIS 10.0	MailEnable Standard 10.34	MariaDB 10.6	W	F	F	F	F	A
ISPConfig 3.2.2	openSUSE Leap 15.4	Apache 2.4.51	Exim 4.94.2	MySQL 8.0.29	F	W	W	F	W	A
	Oracle Linux Server 8.6	Apache 2.4.37	Postfix 3.5.8	MySQL 8.0.26	W	W	W	F	W	A
	Fedora Linux 36 (Server Edition)	Apache 2.4.54	Postfix 3.6.4	MariaDB 10.5-16	W	W	W	F	W	A

Legend

Test passed after additional steps (W)	Test passed when using user with ASCII credentials (A)
Test failed (F)	

UA Measurement WG

UA-Readiness of Popular Identity Platforms

Objectives:

- * Develop a test method and evaluate the OAuth standard and design structure that the identity products integrate into.
- * To assess the UA-readiness of three identity platforms that use OAuth' standards:
 - * Two from commercial source: Okta, Auth0
 - * One from open-source: OpenIAM
- * Initial results: Test pass percentages for target platforms:



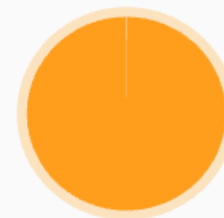
28%

OpenIAM
v.4.1.0.9



19%

OKTA
2022.05.0



100%

Auth0
2202.03 (30269.1762)

UA Technology WG

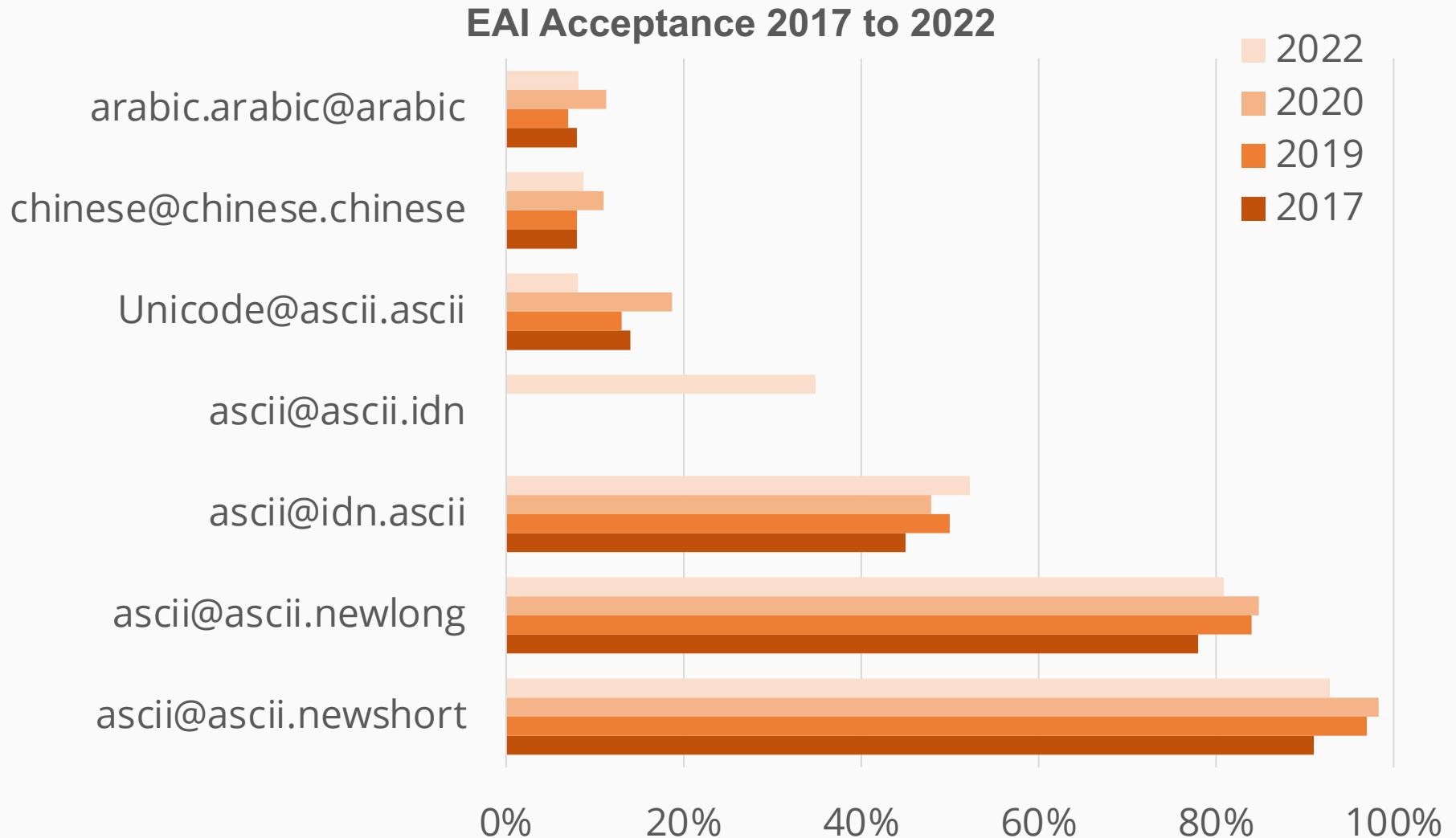
UA Technology WG

- The UA Technology WG focuses on the remediation of existing UA gaps in programming languages, tools, development platforms and standards, as well as the development of technical trainings. The group engages with technology enablers and technology developers as primary stakeholders.
- Published:
 - [UASG 043](#) UA-Ready Code Samples in Java, Python, and JavaScript
- Ongoing tasks:
 - Remediation of UA gaps for websites
 - Identifying the big picture and challenges in adopting UA



Email Acceptance of Top Websites Globally

UASG039



Remediation Workshops and Coding Sessions

- 5 email campaigns were conducted for 1,758 non-UA complaint websites.
- Additional 54 local websites were selected from government, academia, and industry for a pilot study on UA remediation strategy.
- 23 training workshop and outreach activities were organized for the owners and developers of the 54 websites from August 2022 to January 2023.
- Out of 54 websites, 20 websites became UA-ready after the remediation and outreach efforts.



Recommended Actions for the Next Website Test

From a technology perspective, testing may include the following:

- * Checking email field size for maximum characters and more specifically A-label form domain names.
- * Technology stack used for front-end and back-end so as to have fair idea of what all IDNA libraries are required for achieving EAI compliance.
- * HTML input element type's attribute used.
- * Validation mechanisms used.
- * If a given website accepts EAI, then figure out how it is being achieved.
- * If a given website accepts EAI, then undertake tests for sending and receiving EAI emails.



Programming Languages Solutions (UASG043)

Functional minimal running prototypes with libraries and programming languages were developed as example code and best practice for developers to follow in their work.

Programming languages	Java	Java Script	Python3
Libraries	commons-validator	nodemailer	idna
	guava	idna-uts46	email-validator
	lcu	validator	smtplib
	jakartamail		

- * Two different Minimal Viable Products (MVPs) were developed, each making use of a different main library: One for domain names using IDNA-related libraries, and the other one using EAI-related libraries.
- * Code samples that support UA are public and free for any developers on GitHub.
<https://github.com/icann/universal-acceptance>
- * Non-UA-ready libraries are being reported on the public bug tracker and support is provided while addressing the UA shortcomings.
- * New training materials have been developed using the code samples.

Email Address Internationalization (EAI) WG



EAI WG Focus

- EAI support enables email addresses in different languages and scripts and allows sending and receiving of such emails. (RFC6530-RFC6533)
- The EAI WG focuses on technology gaps, remediation, and training materials for email software and service providers.
 - At minimum, all email agents must be configured to send and receive internationalized email addresses.
 - We are trying to ensure that all aspects of the modern email experience deliver full UA-readiness.
- Published:
 - [UASG 044](#) EAI Technical Education and Awareness Directed at Developer Community Websites
 - [UASG 044A](#) Proposed FAQs and Answers

Call to Action: EAI-Readiness Self-Certification Guide

Objective: To increase EAI adoption, define a product category for EAI-supporting email systems, tools, and utilities so that purchasers can demand EAI support and vendors can supply EAI.

IT and procurement managers use these scores to quantify the EAI level they are willing to buy.

Vendors use the specific, granular requirements in the guide to measure and score their own products. Motivated vendors can improve their products to earn the top score and win competitive advantage.

- * For information on user acceptance tests and input by the community on the draft guide, join the ICANN76 session: **New Internationalized Email Self-Certification Guide Overview.**

Defining EAI-Readiness Levels

The self certification guide provides Silver, Gold, and Platinum scores for individual attributes. These scores replace the old Level 1 and Level 2 concepts.

Level	Functionality
Platinum	1. Meets all Gold requirements + 2. Supports all UASG Best Practices guidelines 3. Hosting functionality for internationalized mailboxes is enabled by default [to the user and administrator] 4. May also includes “aspirational” extra features which improve user experience, also listed below 5. Documentation clearly explains how to set up, use and administer Platinum-level features 6. All integrated tools or utilities should be UA-ready and EAI-enabled as well
Gold	1. Meets all Silver requirements + 2. Hosting functionality for internationalized mailboxes is available but not enabled by default 3. Marketing materials and public messaging promote globally inclusive email systems and features 4. Documentation clearly explains how to set up and use Gold-level features 5. Functionality which processes email addresses rather than messages, for example address books, can create and store Unicode email addresses
Silver	1. Enables its users to process email messages from EAI mailboxes but does not host such mailboxes 2. Functionality which processes email addresses rather than messages, for example address books, need not create or store Unicode email addresses

Ratings of Systems Based on Ratings of Components

Email systems are generally made up of multiple components. The guide permits rating of individual components systems. A vendor determines which components and functionality are to be tested and certified.

Email System Components

- * EAI-Ready Mail User Agent (MUA) and EAI-Ready Webmail clients that support IMAP and POP.
- * EAI-Mail Submission Agent (MSA)
- * Mail Transfer Agent (MTA)
- * Mail Delivery Agent (MDA) that supports IMAP and POP
- * Mail Service Provider (MSP)

EAI Progress and What's Ahead

#	Task	Description
1	Self-certification guide for EAI	Beta release of self certification guide for EAI at ICANN76.
2	Knowledge base in technical community	Published knowledge base in technical community e.g., Stack overflow, Server fault: (1) answer EAI questions (2) post questions leading to good answers (3) create tags: get volunteers; contribute and collect statistics; evaluate impact
3	Self-certification tool to generate scores	An online tool for service providers to assess their own tools and services based on the self-certification guide for EAI.
4	Support self-certification for EAI	Help reference providers perform self certification using the guide from E1.
5	Reference service providers and customers to showcase adoption of globally inclusive email	Identify reference service providers and customers to showcase adoption of globally inclusive email and create case studies.

Technical Engagement (UASG044)

EAI Technical Education and Awareness to the Developers' Network

Scope of the work:

One of the major challenges for UA adoption is a lack of awareness among software developers developing and deploying end user applications and services.

This work aims to interact with software developers on popular developer networks and discussion forums (e.g., StackOverflow, GitHub) to provide solutions to existing EAI questions, as well as create UA and EAI awareness.

The decisions software developers will make at the micro-level make a big difference for UA support (e.g., we have found existing advice on RegExes which isn't compliant even to the pre-EAI RFCs – developers who follow such advice have no chance to become UA-ready).

Technical Engagement, Proposed FAQ ([UASG044A](#))

- * Some examples we published in the technical community:

No	Question	Forum
1	non-latin email address validation	Stackoverflow
2	Validating email addresses using jQuery and regex	Stackoverflow
3	Properly validating e-mail addresses	Reddit
4	Is my new gTLD causing it to get filtered as spam?	Serverfault

- * Two blog posts were written by a developer on important aspects of UA:
 - * [Universal Acceptance of Domain Names and E-mail Addresses - What is the issue?](#)
 - * [What is the ultimate goal of the Domain Name and Email ID Validation?](#)
- * A list of “Frequently Asked Questions” were identified and will be answered.

Call to action for community: Review the answers and blogs, and share the links if you agree.

UA Communications WG

UA Communications WG

- The Communications Working Group develops the communication strategy for the UASG and oversees its execution in collaboration with other WGs.
- Completed works:
 - Engaged in regional and Global IGFs: India IGF, Global IGF
 - Paid social media campaign (to promote UA sample codes)
 - UA outreach
- Ongoing work:
 - UA explainer videos
 - UASG Newsletter



India Internet Governance Forum (IGF) 2022

Workshop 14: Internationalized Domain Names - Challenges of Universal Acceptance and Opportunities in Digital Economic landscape for Small Businesses

In collaboration with NIXI, the 2nd India IGF (IIGF)

- * NIXI under the aegis of Ministry of Electronics and IT (MeitY), Government of India and other stakeholders successfully conducted the second edition of India Internet Governance Forum – IIGF2022 from 9 to 11 December 2022.
- * Considering the language diversity both in the country and at a regional level, there were sessions on UA and a multilingual Internet during the event. UASG leaders, UA Local Initiative, and experts collaborated on multiple UA-related sessions.
- * The session covers the key issues like Importance of a multilingual Internet, UA, and its role as foundation of digital economy of India which truly represents the spirit of "reaching the unreachable."
- * YouTube link : <https://www.youtube.com/watch?v=1rHBCCv7Ktk>

Global Internet Governance Forum (IGF) 2022

WS #500 Role of Community to Achieve Universal Acceptance

- * The session was held on 29 November 2022 in Addis Ababa, Ethiopia at the Global Internet Governance Forum – IGF 2022.
- * The session showed that achieving UA is only possible through the joint efforts and cooperation of various stakeholders. Collaboration could be through training, adoption by businesses, updating academic curricula, upgrading technology, and by governments through their procurement policies.
- * The session aimed to help demonstrate how UA can help upgrade digital tools to address the current inequality of the Internet so that the Internet “Connects, Respects and Protects” all people using their own language, identity, culture and interests.
- * Finally, the session also aimed to find mechanisms which can allow UA-readiness of the technology to grow sustainably.

UA Awareness and Outreach

Some activities conducted between August 2022 and February 2023:

By UA Local Initiatives:

- * China: The 5th Session of the Chinese IDN Innovation Application Forum in Beijing
- * India: Multiple capacity building and training sessions to make Indian websites UA-ready
- * Sri Lanka: Press conference; workshops with ICANN and LKNOG on IDNs, UA, and EAI
- * Thailand: Workshop named "Setting up an Email Server with EAI Support on Ubuntu" for staff and university students

By UA Ambassadors:

- * Zhijiang Liu: The 3rd China Internet Infrastructure Resources Conference
- * Harish Chowdhary: The 2nd International Conference on Recent Trends in Forensic Sciences, Vivekanand Global University

By UASG Leaders

- * Mark Svancarek EAI WG chair: APTLD82 - EAI mail service providers meeting - A Singalong for Everyone

Get Involved

Get Involved!

Participate in UA Day events at <https://universalacceptance.day/>

For more information, visit <https://uasg.tech> or email info@uasg.tech.

Join the UA Discuss email alias: <https://uasg.tech/subscribe>

Register to participate in UA working groups <https://uasg.tech/join/>.

Follow, share, like, and engage with the UASG on social media.

Use the UASG hashtag in relevant posts: **#Internet4All**



Twitter: [@UASGTech](https://twitter.com/UASGTech)



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



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

Report a problem if you find an application or webpage that is not UA-ready: <https://uasg.tech/global-support-center/>

спасибо 谢谢
GRACIAS 谢谢

THANK YOU

ありがとうございました MERCI

DANKE धन्यवाद

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