

# An Update to the UASG

UASG Community Update– ICANN 57



Universal Acceptance

# UA in a Nutshell

Universal Acceptance (UA) ensures that all domain names and email addresses can be used by all Internet-enabled applications, devices and systems.

# Agenda

- \* Welcome – Ram
- \* Current State of UASG – Don
- \* Community Outreach Efforts – Lars
- \* EAI (Email Address Internationalisation) – Mark
- \* UA @ ICANN IT – Ashwin/Sigmund
- \* Q&A - Edmon

# An Update on UASG



# UASG Update

- \* Who we are now
- \* Survey Results
- \* Clear Audiences
- \* Clear Communications Strategy
- \* Documentation
- \* Evaluations
- \* Fixing the Foundations

# Who are now...

- \* UA-Discuss has 230 Subscribers
- \* Representations from all five ICANN regions
  - \* Africa & LAC lower
- \* More than 135 Organisations

# Survey results...

<b>EAI -Prepare Good Practice Guides</b>	<b>1.56</b>
<b>EAI - Prepare Quick Guide</b>	1.63
<b>Comms: Based on a core message, develop, place and monitor editorial aimed at CIOs and decision makers in target industries.</b>	1.75
<b>Comms: Produce material for Wikipedia based on efforts of UASG</b>	1.75
<b>Monitoring UA Readiness of most common Web sites</b>	1.81
<b>Logging facility to track UA Issues -Develop a facility and service to track complaints of UA issues and pursue remedies.</b>	1.81

# Good Documentation...

- Use Cases
- Quick Guides to UA
- Detailed Technical Documentation
- Tendering and Contracting language
- FAQs
- RFCs
- Knowledge Base
- Quick Guide to Linkification
- Local Initiatives
- EAI – Coming
  - Quick Guide
  - Detailed Technical Documentation
  - Good Practice Guide
- Course Notes – Coming
- White Paper - Coming

# Evaluations

- Websites
- Browsers
- Messenger & Social Media
- EAI

# Current & Pending Work

- **Website Launched**
- **Targeting Consultants: Scope & Scale**  
**Validating the financial model**
- **University Lecture**
- **Call Logging**
- **IDNA review**
- **Automated Evaluation Tool**
- **White Paper: Economic, Social and Cultural benefits of early adoption**
- **Internet Industry Blueprint:**  
**Registries, Registrars, ISPs, Hosting**
- **IGF**
- **Linkification: Evaluation in Messenger & Social Media Apps**

# Fixing the Foundation

- UA Software Evaluation Criteria – out for review
- Open Source Programming Language – UA Readiness Evaluation and Mitigation

# Administrative

- Preparing for Elections
- Preparing Budgets

# UA & UASG Community Outreach: Brief Overview



# Umbrella Message

**“Universal Acceptance (UA) is essential for the continued expansion of the Internet as it ensures that new domain extensions and email addresses can be used by all Internet-enabled applications, devices and systems.”**

# Supporting Messages

1. Get the next billion users online
2. Businesses, Governments & Organizations have a responsibility
3. Ensure a better user experiences

# Target Audiences

- \* People who can MAKE this happen
  - \* Developers & system architects; consultants/contracting firms
- \* People who can DIRECT this to happen
  - \* CIOs
- \* People who can INFLUENCE this to happen
  - \* C\* Suite, Board members, government officials, consultants, media, community & industry influencers

# UA & UASG Community Outreach: Progress Update

Foundation  
Materials



Engagement  
Activities

# Priorities

- \* Foundation materials
- \* Case study program
- \* Engagement:
  - \* Analysts
  - \* Associations
  - \* Media
- \* Announcements

# Foundation Materials

**Goal:** Build a comprehensive library of documents.

## **Key Activities:**

- \* Published a FAQ Sheet.
- \* Published a Fact Sheet.
- \* Internal Q&A and Messaging.
- \* Industry Analyst Presentation. (in progress)
- \* Association Articles. (in progress)
- \* Continue with documentation efforts

# Case Study Program

**Goal:** Build portfolio of case studies that demonstrate successful UA initiatives.

## Key Activities:

- \* Identify companies and organizations willing to participate in program.
- \* Conduct sourcing sessions to gather details about UA efforts.
- \* Craft one-page case studies, including design, to publish on UASG.tech and seed with relevant media and influencers.
- \* Current participating companies and organizations include:



# Analyst Engagement

**Goal:** Foster relationships with influential analysts to serve as third-party advocates.

## Key Activities:

- \* Prepare briefing materials with analyst bios and anticipated questions; conduct prep sessions with UASG spokespeople
- \* Conduct 1:1 briefings with analysts at top-tier firms:



Lily Varon, Forrester  
(early November)



Stephen O'Grady, Redmonk  
(scheduling in progress)



Michael Versace, IDC  
(scheduling in progress)

- \* Leverage analysts in future communications to offer third-party credibility and underscore UA relevance

# Associations Engagement

**Goal:** Communicate directly with relevant technology focused associations worldwide as a means of engaging with members who can take action on UA.

## Key Activities:

- \* Identify relevant technology member associations worldwide, focusing on key target audiences (e.g. CIOs, software developers):
  - Association of Information Technology Professionals (North America)
  - CompTIA (global)
  - Corporate IT Forum (global)
  - Internet Infrastructure Coalition (global)
  - eco – Association of the Internet Industry / EuroISPA (global / Europe)
- \* Consult with UASG members to identify organizations to which they may belong to leverage existing relationships
- \* Engage with organizations and identify opportunities to communicate with members (e.g. newsletters, presentations)
- \* Provide organizations with appropriate materials for publications and conduct follow-up

# Media Engagement

**Goal:** Engage key technology-focused media worldwide on the topic of UA to communicate its importance and elicit action on implementation.

## Key Activities:

- \* Identify relevant technology media worldwide focusing on key target audiences (e.g. CIO, software developer) (completed)
- \* Reengage with key targets targeted for initial soft-sounding (e.g. IDG, Motherboard)
- \* Conduct interviews and identify by-lined opportunities in publications with a CIO readership (e.g. CIO Magazine (to be published Nov.), CIO.com, IT Professional Magazine, etc.)
- \* Leverage potential news opportunities:
  - UA automated tool
  - White paper – partner with Analysys Mason to determine media angles and map out strategic plan

# Influencer Engagement

**Goal:** Get leading lights in the software industry to be aware of UA and advocate for its pursuit

## Key Activities:

- \* Identify relevant individuals and organisations
- \* Create an Advisory Council to add gravitas and perspective
- \* Continue with UA Ambassador programme
- \* Collect testimonials (video, written)

# Other Initiatives

**Goal:** Get software outsourcing companies and CIO Advising professionals aware of the issues, their opportunities, and get them to spread the message.

## **Key Activities:**

- \* Build and validate a model of the economic opportunities
- \* Seed awareness in leading and niche operators
- \* Coordinate with their account management teams with relevant content

# What's Ahead



ICANN  
57  
HYDERABAD  
3-9 November 2016

## November

- Begin to publish cases
- Association outreach
- Analyst briefings
- Media engagement
- CIO Byline Hits

## December

- Finalize plan for White paper
- Finalize plan for automated tool announcement / blog
- Continued association outreach

## January

- White paper outreach
- Automated tool announcement / blog
- Continued association outreach

EAI



# What is EAI

- \* EAI (Email Address Internationalisation)
- \* The ability to send email with IDNs and display correctly
- \* The ability to have UTF8 characters in mailbox names

# Internationalised Email Formats

## Email Address Internationalization (RFC 6530 - 6533)

Both portions of the address – the **local part** and the **domain name part** – are in Unicode

用戶@example.みんな

## IDN-style Email Address

Related to RFC 3492

Replaces the Unicode domain name portion with **Punycode domain name**

From RFC 3492, these representations *\*should\** be equivalent, but there is no guarantee that all software and services will treat them the same

用戶@example.xn-q9jyb4c

# Good Practices for EAI From UASG-007

- Users should be allowed, but not required, to enter ASCII Compatible Encoded (or “Punycode”) text in place of its Unicode equivalent
- Convert non-Unicode data to Unicode before display.
- For example, the end user should see “example.みんな” as opposed to “example.xn-q9jyb4c”.
- Don’t generate IDN-Style email addresses, but do be able to handle them if presented by someone else’s software.
- Robust UA-ready software and services may be able to handle and treat all these formats, even those which are not RFC-compliant.
- UA-ready software should generate true EAI email addresses only

# This Prohibited Format May be Helpful

Using Punycode equivalents in the **local part** of the email name is not allowed by EAI and is not defined by RFC 3492

ユーザー@example.みんな 

xn--youq53b@example.xn--q9jyb4 

If robust email software allows the entry and conversion of this format, any ASCII-only user can create EAI address book contacts

# Where is EAI Happening?

- Microsoft
- Google
- Apple
- Yandex (Russia)
- Coremail (China)
- XgenPlus (India)
- Throughway (Thailand)
- SaudiNic
- OpenFind (Taiwan)
- Horde (USA)
- PostFix (Global)

# What UASG is doing

- \* Created an group of EAI practitioners
- \* Planning Documents
  - \* Quick Guide to EAI – Aimed at niche email software developers
  - \* Comprehensive Technical Guide – including troubleshooting guide
  - \* Good Practice Guide to EAI
- \* Identifying EAI practitioners & Encouraging exchanging of test accounts for interoperability testing
- \* Gathering planned for April in Seattle
- \* Monitoring efforts at IETF
- \* Evaluation of major email software and service providers for EAI readiness

UA @ ICANN IT





# Becoming Universal Acceptance Ready

Ashwin Rangan | ICANN 57 | 6 November 2016

# Universal Acceptance Ready

1

Universal  
Acceptance Ready  
What/Why

2

UA-Ready  
ICANN's Original  
Plan

3

UA-Ready  
Lessons Learned

4

UA-Ready  
ICANN's New Plan

5

UA-Ready  
Zensar Evaluation  
Tool

6

Thank you  
UASG!

All domain names and email addresses should be treated equally.

Including:

пример.рф

Internationalized  
Domain Names

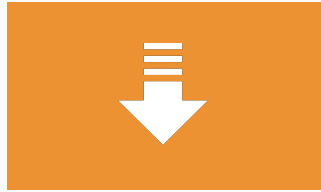
site.example

New gTLDs

名称@网站.域名  
名

Internationalized  
Email Addresses

# Key Principles



Accept



Validate



Store



Process



Display



Required for multilingual Internet



Enables next billion users

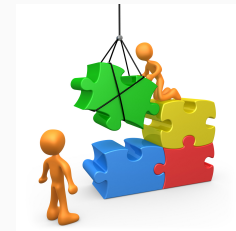


Crucial to online identity (IDN)

## 123

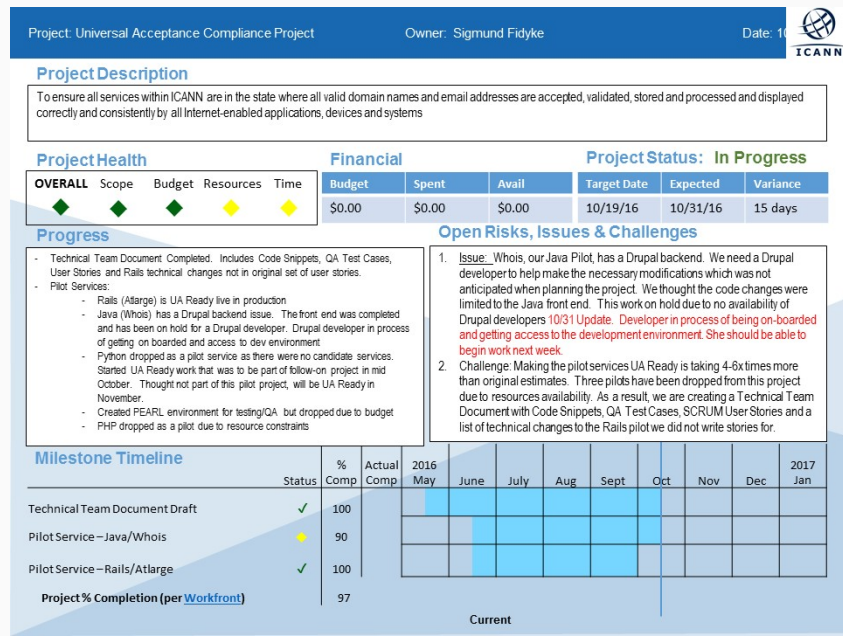
Three-Phase approach to becoming UA-Ready

1. Pilot projects on different platforms
2. Review and compile lessons learned
3. Create plan to update all apps



# UA Ready – Pilot Project

- Pilot project for becoming UA-Ready:
  - Project Charter, Manager, Reporting
  - One app/platform: Java, Rails, Python, PHP/Perl



# UA-Ready – Lessons Learned

1. Easy – Handle long ASCII domains

`www.mysite.shopping`

2. Hard! – Handle IDN (Unicode)

`пример.рф`

- Find every place you use a domain
- Be consistent in how you use/store data **everywhere**
- Unanticipated side effects
- Storage problems (size, sharing, etc.)
- Interaction with 3<sup>rd</sup> Party applications
- Workflow & program flow problems
- UTF-8 not always enough
- Don't forget email
- Testing is a challenge

`名称@网站.域名`

3. Important – Document what you learned!



## 4. Team knowledge and experience helps

- First time (per team/per platform)
  - Programming effort 500% of guess
  - Testing effort 300% of guess
- Second time (same team/platform) 33% of 1<sup>st</sup> time
- Many times (minimum) 15% of 1<sup>st</sup> time

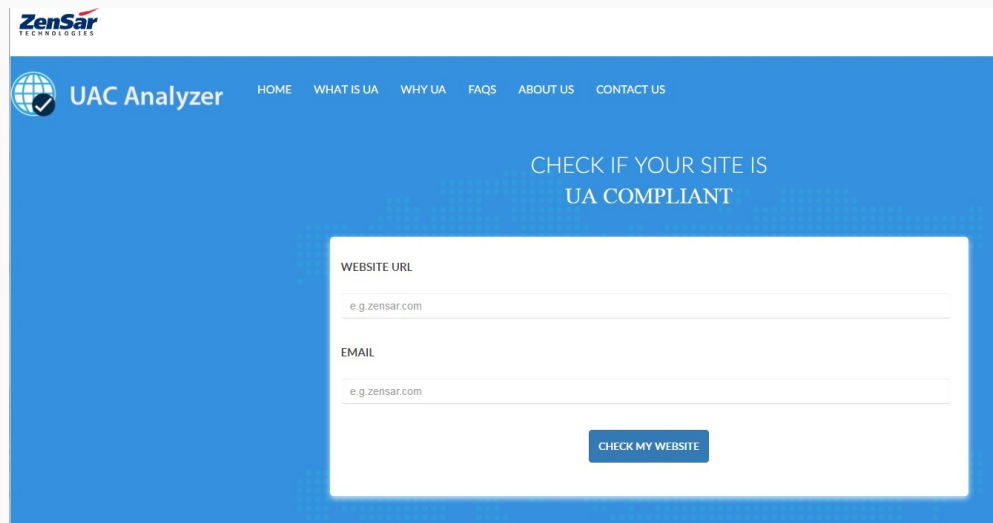
If you estimate 3 weeks (2 dev/1 QA), this means:

- First time: 13 weeks
- Second time: 4 weeks
- The rest: 2 weeks

1. Pilot Project: completed
2. All Apps: long ASCII domains
  - NOT fully UA-Ready
  - Most new gTLDs are ASCII (.shopping, .cloud)
  - 5 days first time
  - 1-2 days each for rest (automated testing)
3. Run Zensar tool for list of applications to target
4. Create user stories for full UA-Readiness
  - Add stories to next release of each application
  - Create IDN test environment & handle emails

# UA-Ready – Zensar UAC Analyzer

- Online resource
- Crawls through the specified website
- Finds uses of links
- Validates code for handling Unicode
- Offers example fixes to code that is not ready for UA



The screenshot shows the Zensar UAC Analyzer website. The header features the Zensar Technologies logo and a navigation menu with links for HOME, WHAT IS UA, WHY UA, FAQs, ABOUT US, and CONTACT US. The main heading reads "CHECK IF YOUR SITE IS UA COMPLIANT". Below this, there is a form with two input fields: "WEBSITE URL" and "EMAIL", both with placeholder text "e.g. zensar.com". A blue button labeled "CHECK MY WEBSITE" is positioned at the bottom of the form.



## Universal Acceptance Steering Group

Helping software developers and website owners understand how to update their systems.



Learn more at <http://uasg.tech>

Q&A

