

ICANN
57
HYDERABAD
3-9 November 2016

UNIVERSAL ACCEPTANCE OF ARABIC SCRIPT

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Reviewed by :- TF-AIDN members



USER EXPECTATIONS

Domain/Folder/Page.ext

تترا.مصر/صفحة ⓘ

تترا.مصر/مجلد/صفحة ⓘ

← → ↻ ⓘ تترا.مصر/مجلد/main.asp

اللغة: العربية ▾ هل لديك حساب؟ تسجيل الدخول ▾



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IN ORDER TO ACCEPT IDN “ARABIC” NAMES :-

- ❑ ASCII and non ASCII domain names and e-mail addresses should be treated equally .
 - ❖ Applications should support for IDNs.
 - ❖ Sign-up to most popular applications using my IDN Email.
- ❑ ASCII and non ASCII should be Accepted, Stored, Processed and Displayed in a consistent and effective manner.
- ❑ Users Trust

- About TF-AIDN
- UA current work
- Testing Strategy for Arabic script test-cases
- Main goal of test-cases
- Acceptance and Validation criteria
- New added test-cases sample

Agenda



(TF-AIDN) is a community group that promotes the use of Arabic IDNs. A major accomplishment was the development of Arabic Script's Label Generation Ruleset (LGR), the first to be integrated into the Root Zone LGR.

The task force is currently developing second-level LGRs for languages that use the Arabic script.

Another project is identifying and addressing the challenges of universal acceptance of Arabic script IDNs;



TF-AIDN WG UA CURRENT WORK₁

- Use Cases perimeter.
 - 1.IDN test-cases
 - 2.IRI “Internet Resource Identifier ” test-cases
 - 3.EAI test-cases



TF-AIDN WG UA CURRENT WORK

- Overall Tasks of TF-AIDN UA work group

1. Request the UASG document. ✓
2. Review UASG document test-cases to be sure that cases covers all issues that make clients confused ✓
3. Correct current test-case ✓
4. Add new test-cases if required to cover all issues that make clients confused ✓
5. Fulfill the test-cases ✓
6. Submit UASG document back to UASG ✓



REVIEW UASG DOCUMENT TEST-CASES

During review TF-AIDN agreed on the following to start with:-
“Istanbul 2016”

- ☐ Define test case patterns :
ASCII, RTL, UNICODE,
Punycode (ARTL), Depth
Levels of IDNs and IRIs
- ☐ Define Acceptance and
validation criteria
- ☐ Give a representative test
case for each pattern
- ☐ Share with UASG (this
document)



REVIEW UASG DOCUMENT TEST-CASES

- ☐ Collect Test case data
- ☐ Instantiate Test cases using collected test data
- ☐ Develop test methods :
manual and/or automated
- ☐ Test and collect Test Results
- ☐ Share with UASG (still to come)



TESTING STRATEGY FOR ARABIC SCRIPT

TEST-CASES

Entities that composes a patterns

0 to 9	EN	Arabic numbers
٩ to ٠	AN	Arabic Indic numbers U+0660 to U+0669
٩ to ٠	AEN	Extended Arabic Indic U+06F0 to U+06F9
-		Hyphen



	0	1	2	3	4	5	6	7	8	9
U+066x	٠	١	٢	٣	٤	٥	٦	٧	٨	٩
U+06Fx	٠	١	٢	٣	٤	٥	٦	٧	٨	٩

TESTING STRATEGY FOR ARABIC SCRIPT TEST-CASES

Patterns generated digest :-

Calculation Steps	# of patterns
IDN	
1 generate all possible combinations for IDNs	6075
2 Shrink down the number of combinations using relevance	177
3 Filter reducible patterns to existing patterns	27
EAI	
4 generate local part patterns	6
IRI	
5 generate patterns	4



MAIN GOAL OF TEST-CASES

- ❑ Developers can make IDN compatible applications more satisfactory regards to IDN names , IRI and EAI.
- ❑ Users can trust IDN names or EAI.



ACCEPTANCE AND VALIDATION CRITERIA

IDN Acceptance criteria		Validation criteria
Registered	Working	Conformity

IRI Acceptance/Validation criteria	
Working	Conformity

EAI Acceptance/Validation criteria			
Set-up	Send	Receive	Conformity

ACCEPTED



WORKING TEST-CASES SAMPLE

Pattern	Implementation Sample	Registered	Working	Conformity
RTL.ASCII	top.اختبار-القبولالعالمي.	Yes	Yes	
RTL.RTL	مثال.السعودية	Yes	Yes	
RTL-RTL.RTL	اختبار-القبولالعالمي.شبكة	Yes	Yes	
RTL.RTL.RTL	فرع.مثال.السعودية	Yes	Yes	Yes
RTL-123.RTL.RTL	أرقام-123.مثال.السعودية	Yes	Yes	Yes



NEW ADDED TEST-CASES SAMPLE

Pattern	Sample	Registered	Working	Conformity
RTL-١٢٤.ASCII				
RTL-١٢٤- RTL.ASCII				
RTL-١٢٤.ASCII				
RTL-١٢٤- RTL.ASCII				
RTL.RTL.RTL	فرع.مثال.السعودية	Yes	Yes	Yes
RTL.ASCII.RTL				
RTL- 123.RTL.RTL	أرقام.123-مثال.السعودية	Yes	Yes	Yes
RTL- ١٢٤.RTL.RTL				
RTL- ١٢٤.RTL.RTL				
RTL.RTL.ASCII				
RTL- ١٢٤.RTL.ASCII				



NEW ADDED TEST-CASES SAMPLE

Pattern	Implementation Sample	Working	Conformity
RTL.RTL.RTL/RTL	فرع.مثال.السعودية/مجلد/	Yes	No
RTL.RTL.RTL/ascii	/folder/فرع.مثال.السعودية/	Yes	No
RTL.RTL.RTL/ascii/ascii.ascii	p/folder/فرع.مثال.السعودية/age.html	Yes	No
RTL.RTL.RTL/RTL/RTL.ascii	فرع.مثال.السعودية/مجلد/صفحة.html	Yes	No



NEW ADDED TEST-CASES SAMPLE

Pattern	Sample	Registered	Working	Conformity
ASCII@RTL.ascii	info6@ختبار- القبولالعالمي.top	Yes	Yes	Yes
RTL@RTL.RTL	اختبار@رسيل.السعودية	Yes	Yes	
RTL.RTL@RTL.RTL				
RTL124@RTL.RTL				
RTL١٢٤@RTL.RTL				
RTL١٢٤@RTL.RTL				
RTL124.567RTL@RTL.RTL				





تریمہ کاسیہ

شکراً

شکریہ

با سپاس

تشکر

Thanks