

# Billions of New Internet Identities



## The Internet Has Changed

Users can register names on more than 1,200 new generic top-level domains.

- myname.संगठन
- myhobby.中文网
- company.build
- campaign.brand
- tourism.london

Users can create email addresses using Arabic, Chinese, Cyrillic, Latin, Thai and other scripts.

- zoé.ave@région.fr
- สมชาย@ตัวอย่าง.ไทย

## Are You Ready?

Can your systems and applications handle the possibilities? If they are Universal Acceptance-ready, they can. Systems and applications must:

### ACCEPT



Receive domain names and email addresses as strings of characters from user interfaces, files or application program interfaces (APIs) used by software applications or online services.

### VALIDATE



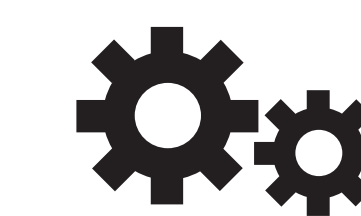
Check domain names and email addresses, received or emitted, for syntax correctness without using obsolete heuristics, such as character length or type (i.e., ASCII-only).

### STORE



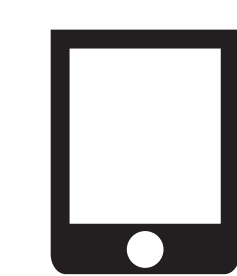
Hold domain names and email addresses, both temporarily and long term, in RFC-defined formats (preferred) or other formats that can transform between RFC-defined formats.

### PROCESS



Perform an activity (e.g., searching or sorting a list) using domain names or email addresses, or transform domain names or email addresses into an alternate format (e.g., storing ASCII as Unicode). Additional validation may also occur during processing. Domain names and email addresses can be processed in an unlimited number of ways, which reinforces the need for conventions that ensure data is being understood and classified consistently.

### DISPLAY



Properly render domain names and email addresses within a user interface. Application-specific transformations may be required when scripts used are not supported in the underlying operating system and/or strings are not stored in Unicode.

Email software developers need to consider the following as they make their products internationalization-ready:

### SERVER



(Mail Transport Agent - MTA)  
Confirm internationalization-readiness – for example, advertise SMTPUTF8 support – when connecting to another MTA.

### CLIENT



(Mail User Agent – MUA)  
Display domain names in Unicode.  
Store and display mailbox names in Unicode.  
Pass domain names to the MTA in A-Label format.  
Follow good practice guides for linkification and domain name validation (visit uasg.tech/documents).

## Why it Matters

To excel in the long run, organizations need to ensure their systems work with the naming infrastructure of the Internet – the domain name system. Internet users have a wealth of new ways to represent themselves online. Being UA-ready means that you can support customers wherever they choose to be, which leads to happier customers.