

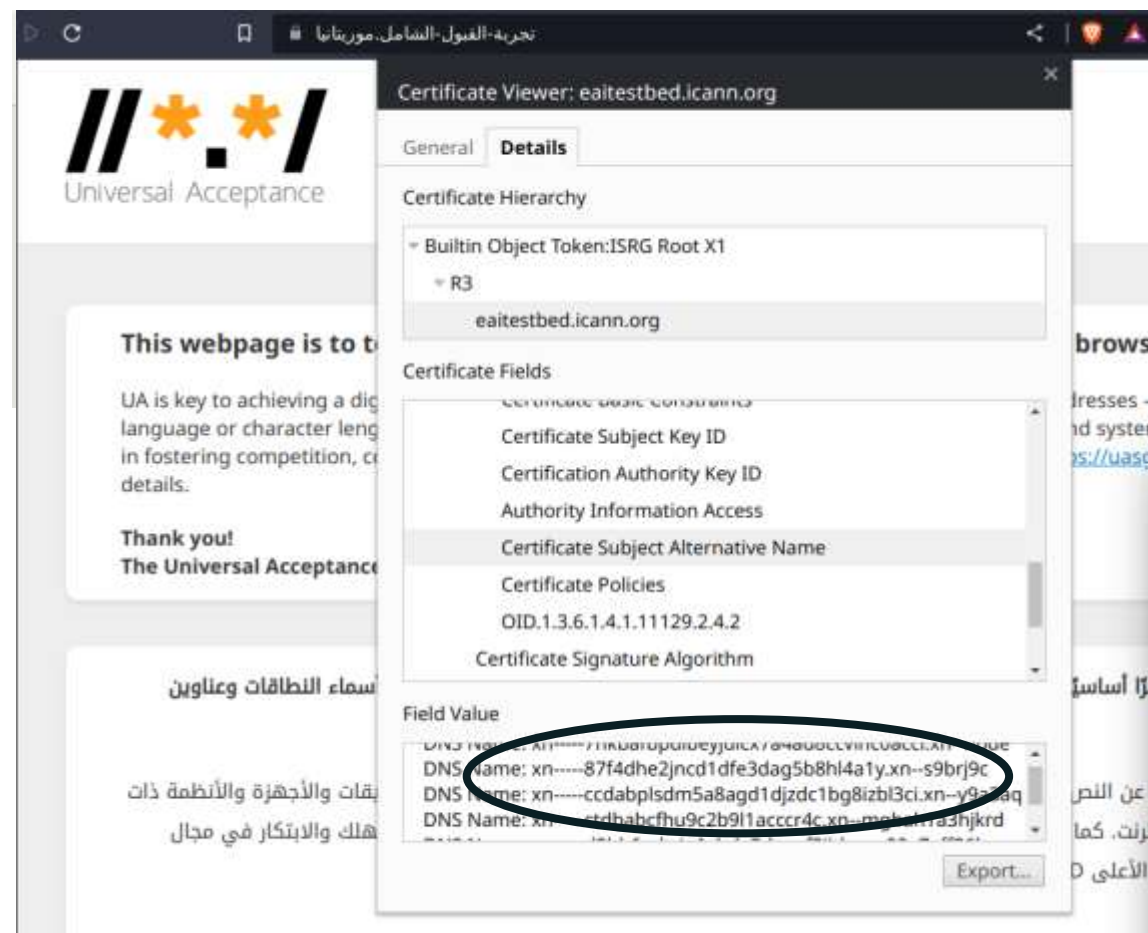
UA Remediation

Finding bugs and fixing them



28 March 2024, Belgrade UA Day
Arnt Gulbrandsen, UA Technical Senior Manager

- ⦿ New user interface requirements.
- ⦿ Linkification.
- ⦿ Email address handling.
- ⦿ Domain handling.
- ⦿ The usual number of regular bugs.



- ⦿ Bugs are often in websites, Software as a Service, commercial software.
- ⦿ Open source software is also not bugfree.
- ⦿ Open source libraries, frameworks, plugins affect many users and are important.
- ⦿ Programming languages.



JDK / JDK-6988055

Support IDNA2008

Open ▾

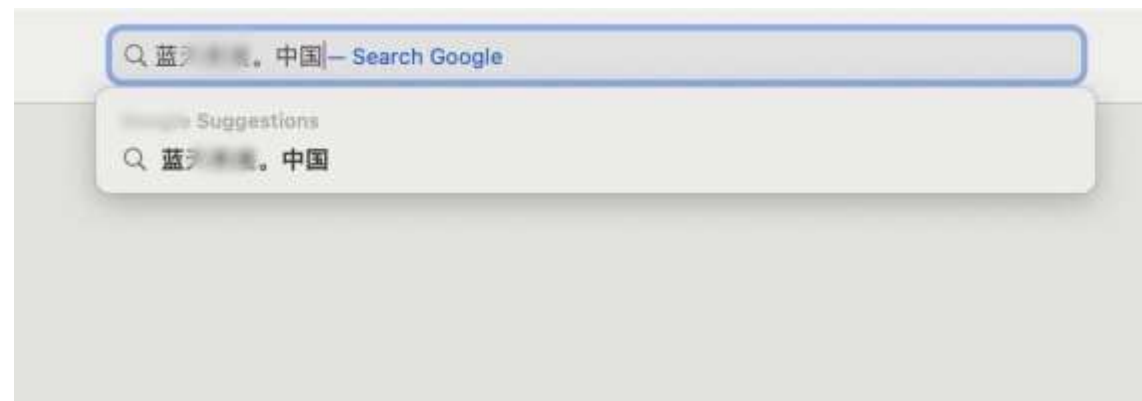
▼ Details

Type:	Enhancement	Resolution:	Unresolved
Priority:	P4	Fix Version/s:	None
Affects Version/s:	7		
Component/s:	core-libs	JDK	
Labels:	None		
Subcomponent:	java.net		
CPU:	generic		
OS:	generic		

▼ Description

Our current implementation of the java.net.IDN class is based on the IDNA2003. The revision to approved in 2010 as IDNA2008 which includes some incompatible changes. The implementation of those changes. Here is the link to the FAQ page on unicode.org:

- ⦿ Mostly closed source.
- ⦿ Finding a bug can be simple.
- ⦿ ... or difficult.
- ⦿ Contacting the company is easy, but reaching developers is always difficult.
- ⦿ Persuading the company is difficult.
 - “Hasn’t been a problem until now.”
 - “Our customers haven’t complained.”



- ⦿ Much of the classic Internet software is open source:
 - IMAP servers.
 - SMTP servers.
- ⦿ Comparatively easy to reach.
- ⦿ At least the top four SMTP servers are UA-ready now.
- ⦿ The top three IMAP servers are on the way:
 - One ready.
 - Two in good dialog with us.
- ⦿ Little end-user software is open source.

15:07   



Postfix SMTPUTF8 support

Overview

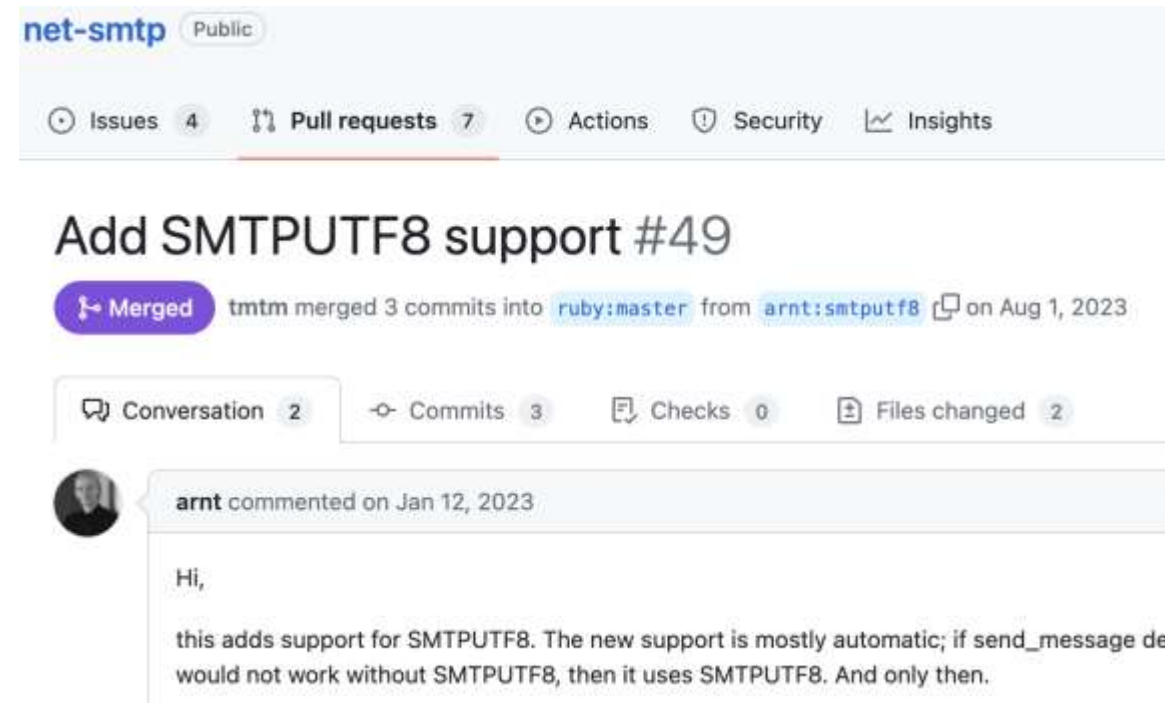
This document describes Postfix support for Email Address Internationalization (EAI) as defined in [RFC 6531](#) (SMTPUTF8 extension), [RFC 6532](#) (Internationalized email headers) and [RFC 6533](#) (Internationalized delivery status notifications). Introduced with Postfix version 3.0, this fully supports UTF-8 email addresses and UTF-8 message header values.

Topics covered in this document:

- [Building with/without SMTPUTF8 support](#)
- [Enabling Postfix SMTPUTF8 support](#)
- [Using Postfix SMTPUTF8 support](#)
- [SMTPUTF8 autodetection](#)
- [Limitations of the current implementation](#)
- [Compatibility with pre-SMTPUTF8 environments](#)
- [Compatibility with IDNA2003](#)
- [Credits](#)

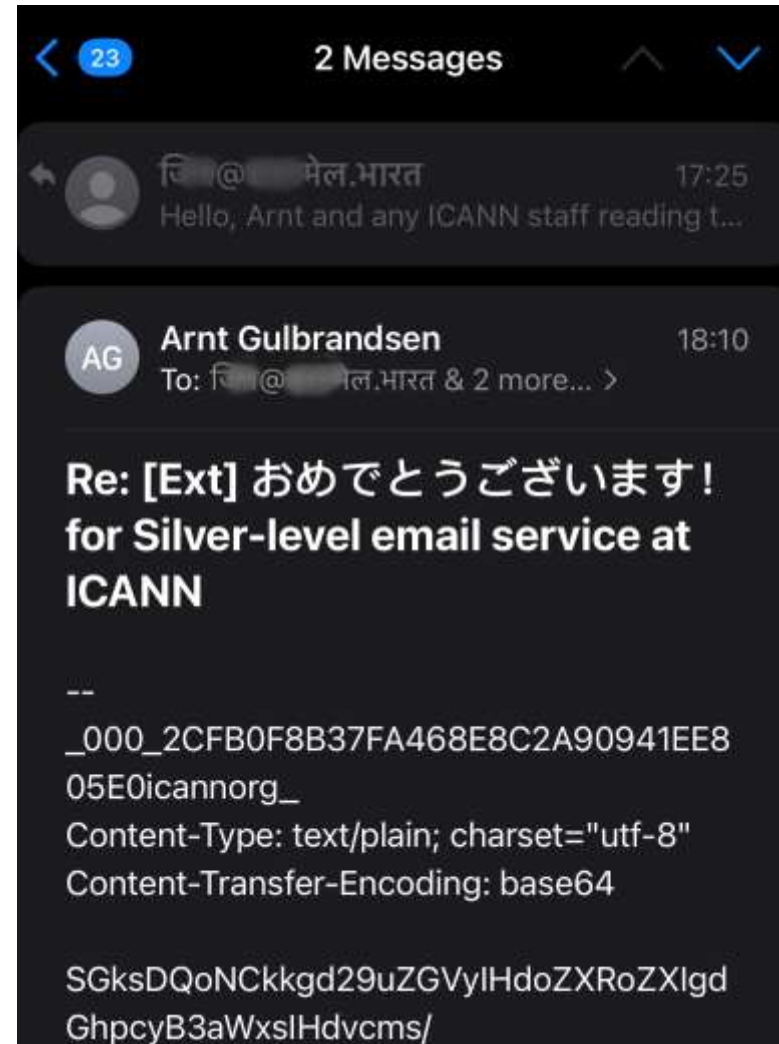
Building Postfix with/without SMTPUTF8 support

- ⦿ Much software is based on open foundations:
 - Rails
 - Django
 - Laravel
 - ...
- ⦿ An expensive webshop product may send its mail using a free mail library written by hobbyists.
- ⦿ An expensive SaaS product may in turn depend on a free database for its core function.



The screenshot shows a GitHub pull request for the repository 'net-smtp'. The pull request is titled 'Add SMTPUTF8 support #49' and is in a 'Merged' state. It was merged by 'tmtm' on August 1, 2023, merging 3 commits from the 'arnt:smtputf8' branch into the 'ruby:master' branch. The pull request has 4 issues, 7 pull requests, 2 conversations, 3 commits, 0 checks, and 2 files changed. A comment from 'arnt' dated January 12, 2023, is visible, stating: 'Hi, this adds support for SMTPUTF8. The new support is mostly automatic; if send_message de would not work without SMTPUTF8, then it uses SMTPUTF8. And only then.'

- ⦿ Many programming languages provide readymade components:
 - Java has java.net.URL
 - Python has Requests and Net::SMTP
- ⦿ Open Source and reachable.
- ⦿ Very slow change process.
- ⦿ Smartphones include programming languages and preinstalled apps.
- ⦿ Even slower change process.
- ⦿ Difficult to reach relevant teams.



Engage with ICANN – Thank You and Questions



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