



IDN Emails and TEST BED

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- IDN RFC 2003 published
 - IDNAbis almost finish its job at the end of 2009.
- Users want to use IDN not only in web browsing but also in email address
 - Why not [Native-characters]@IDN?
- IETF EAI (Email address internationalization) working group to try to solve the problem of IDN email

TLD
DN
EMAIL

.CN
Beijing.cn
name@abc.cn

.中国
北京.cn
名字@北京.cn

- The existing email address has two parts, local part and domain part separated by the sign “@” . for example yaojk@cnnic.cn
- Many want to use their native language as the address.
用户@中国互联网络信息中心.cn
- The domain part has been addressed by IDNA[RFC3490]
- The <local-part> portion are restricted to a subset of ASCII.
 - no standard on local-part
- This poses a fundamental barrier for users needing mail addresses to be expressed in a richer set of characters, such as many Asian characters.

Feb 2003 – IMAA

Start to talk about i-Email requirement and issues

May 2005 – CDNC Meeting/ JET Meeting

Discuss possible solutions

Sep 2005 – i-Email Beijing Meeting

JET submit the drafts to IETF

Nov 2005 – IEE BoF on IETF 64

Discuss Internet drafts

Mar 2006 – EAI WG on IETF 65 (WG established)

(Co-chaired by Harald Alvestrand and Xiaodong LEE)

July 2006 – EAI WG on IETF 66

July 2007 – EAI WG published RFC 4952

Sep 2008 – EAI WG 3 core RFC published

March 2009 – Downgrade RFC published

Overview and Framework for Internationalized Email
(RFC4952 July 2007)

SMTP extension for internationalized email address
(RFC5336 September 2008 submitted by CNNIC)

Internationalized Email Headers
(RFC5335 September 2008)

International Delivery and Disposition Notifications
(RFC5337 September 2008)

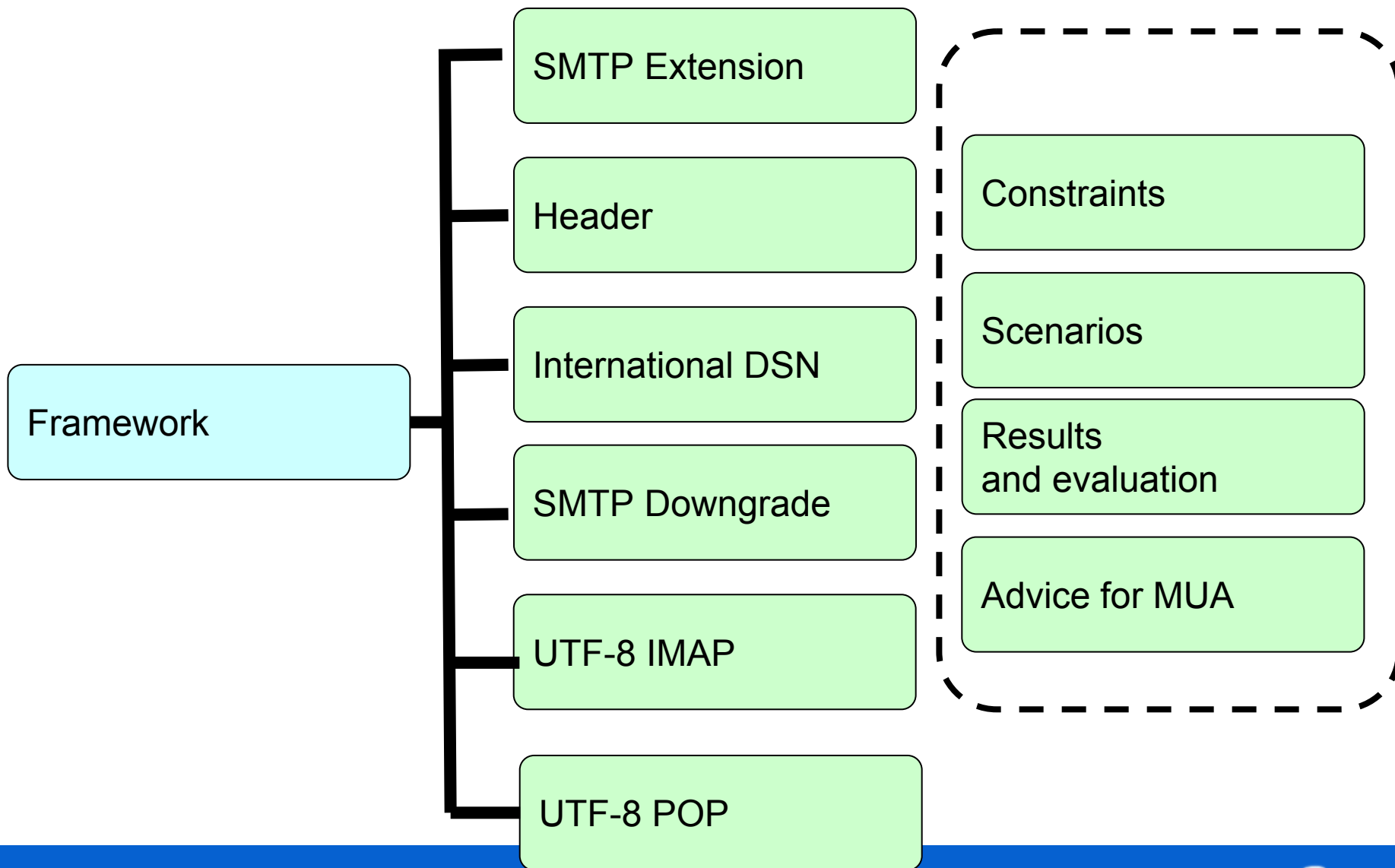
Downgrading mechanism for Email Address
Internationalization (RFC5504 March 2009)

UTF-8 Mail: Scenarios

IMAP Support for UTF-8

Mailing Lists and Internationalized Email Addresses

POP3 Support for UTF-8



Documents implemented

SMTPext

UTF8header

EAI downgrade

EAI POP (in progress)

EAI IMAP (in progress)

Open source software used

Postfix

Cyrus-imap

openwebmail



Testing between EAI system with the same implementation (postfix)

Scenario 1: Two i18mail users

From: <测试@邮件.postfix.asrc.cn>

To: <测试@中文.postfix.asrc.cn>

From 测试@邮件.postfix.asrc.cn Fri Jul 18 13:51:10 2008
Return-Path: <测试@邮件.postfix.asrc.cn>
Received: from murder ([unix socket])
by m2.localdomain (Cyrus v2.2.12) with LMTPA;
Fri, 18 Jul 2008 13:50:42 +0800
X-Sieve: CMU Sieve 2.2
Received: from xn--5nQ051N.postfix.asrc.cn (unknown [218.241.108.51])
(using TLSv1 with cipher ADH-AES256-SHA (256/256 bits))
(No client certificate requested)
by xn--fiQ228C.postfix.asrc.cn (Postfix) with ESMTP id 601EA370215
for <测试@中文.postfix.asrc.cn>; Fri, 18 Jul 2008 13:50:41 +0800 (CST)
Received: from xn--5nq051n.postfix.asrc.cn (localhost.localdomain [127.0.0.1])
by xn--5nQ051N.postfix.asrc.cn (Postfix) with ESMTP id AB8D85C04ED
for <测试@中文.postfix.asrc.cn>; Fri, 18 Jul 2008 13:51:10 +0800 (CST)
From: <测试@邮件.postfix.asrc.cn>
To: "测试@中文.postfix.asrc.cn" <测试@中文.postfix.asrc.cn>
Subject: TEST 2 i18n users
Date: Fri, 18 Jul 2008 13:51:10 +0800
Message-Id: <20080718054907.M71057@xn--5nq051n.postfix.asrc.cn>
MIME-Version: 1.0
Content-Type: text/plain;
charset=utf-8
Status: R
TEST 2 i18n users, welcome to IETF meeting.

Testing between EAI system with the same implementation (postfix)

Scenario 2: Three i18mail users

From:

From: <测试@中文邮件.cn>

To: <测试@中文.postfix.asrc.cn>

Cc: <测试@邮件.postfix.asrc.cn>

Charset ▾

-- Stationery for Reply -- ▾

◀ 1/47 ▶

From 测试@中文邮件.cn Fri Jul 18 11:42:46 2008

Return-Path: <测试@中文邮件.cn>

Received: from murder ([unix socket])

by blade1.localdomain (Cyrus v2.2.12) with LMTPA;

Fri, 18 Jul 2008 11:42:46 +0800

X-Sieve: CMU Sieve 2.2

Received: from xn--fiqys627cso3b.cn (localhost.localdomain [127.0.0.1])

by xn--5nQ051N.postfix.asrc.cn (Postfix) with ESMTP id 325765C067B;

Fri, 18 Jul 2008 11:42:46 +0800 (CST)

From: <测试@中文邮件.cn>

To: "测试@中文.postfix.asrc.cn" <测试@中文.postfix.asrc.cn>

Cc: "测试@邮件.postfix.asrc.cn" <测试@邮件.postfix.asrc.cn>

Subject: test

Date: Fri, 18 Jul 2008 11:42:46 +0800

Message-Id: <20080718034133.M58706@xn--fiqys627cso3b.cn>

MIME-Version: 1.0

Content-Type: text/plain;

charset=utf-8

Status: R

--

Open WebMail Project (<http://openwebmail.org>)

◀ 1/47 ▶

Testing between EAI system with the same implementation (postfix)

Scenario 3: An il8mail user sends to one ascii user

From: <测试@邮件.postfix.asrc.cn
<test@m1.postfix.asrc.cn>>

To: <yaojk@cnnic.cn>

Received: (you send program): Tue, 29 Jul 2008 22:26:03 +0800

Message-ID: <417341563.00919@cnnic.cn>

Received: from unknown (HELO ironportc600.cnnic.cn) (218.241.99.60)

by 159.226.7.146 with SMTP; Tue, 29 Jul 2008 22:26:03 +0800

X-IronPort-Anti-Spam-Filtered: true

X-IronPort-Anti-Spam-Result: AisFAES7jkja8Wwz/2dsb2JhbACLIIganIg

X-IronPort-AV: E=Sophos;i="4.31,272,1215360000";

d="scan'208";a="25777175"

Received: from unknown (HELO xn--5nQ051n.postfix.asrc.cn) ([218.241.108.51])

by ironportc600.cnnic.cn with ESMTP; 29 Jul 2008 22:26:02 +0800

Envelope-Downgraded-From: =?utf-8?B?P0ali+ivlUDpgq7ku7YucG9zdGZpeC5hc3JjLmNupg==?= <test@m1.postfix.asrc.cn>

Received: from xn--5nq051n.postfix.asrc.cn (localhost.localdomain [127.0.0.1])

by xn--5nQ051n.postfix.asrc.cn (Postfix) with ESMTP id BCC9C5C05A2

for <yaojk@cnnic.cn>; Tue, 29 Jul 2008 22:25:07 +0800 (CST)

Downgraded-From: =?utf-8?B?ImRvbmdkb25nIiA85rWL6K+VQ0mCruS7ti5wb3N0Zml4LmFzcmNuyY24gPHRlc3RAbTEucG9zdGZpeC5hc3JjLmNupj4=?

From: "dongdong" <test@m1.postfix.asrc.cn>

To: "yaojk@cnnic.cn" <yaojk@cnnic.cn>

Subject: yao

Date: Tue, 29 Jul 2008 22:25:07 +0800

Message-Id: <20080729142451.187316@xn--5nq051n.postfix.asrc.cn>

MIME-Version: 1.0

Content-Type: text/plain;

charset=utf-8

--

Testing between EAI systems with different implementations

Test with NIDA (own implementation with python)

From: <测试@邮件.postfix.asrc.cn>

To: <미시시피의조치통@테스트.kr>

Testing between EAI systems with different implementations

Test with JPRS (own implementation with C)

From: <测试@邮件.postfix.asrc.cn>

To: <テスト@日本語.dnslab.jp>

Return-Path: <测试@邮件.postfix.asrc.cn>↵
Delivered-To: <テスト@日本語.dnslab.jp>↵
Received: from xn--5nQ051N.postfix.asrc.cn ([218.241.108.51] /TLS)↵
by eai.dnslab.jp↵
for <テスト@日本語.dnslab.jp>;↵
Mon, 14 Jul 2008 12:44:48 +0900↵
Received: from xn--5nq051n.postfix.asrc.cn (localhost.localdomain [127.0.0.1])↵
by xn--5nQ051N.postfix.asrc.cn (Postfix) with ESMTP id B04CC5C0686↵
for <テスト@日本語.dnslab.jp>; Mon, 14 Jul 2008 11:40:48 +0800 (CST)↵
From: <测试@邮件.postfix.asrc.cn>↵
To: "テスト@日本語.dnslab.jp" <テスト@日本語.dnslab.jp>↵
Subject: test once [without](#) alt-address ↵
Date: Mon, 14 Jul 2008 11:40:48 +0800↵
Message-Id: <20080714034033.M87293@xn--5nq051n.postfix.asrc.cn>↵
MIME-Version: 1.0↵
Content-Type: text/plain;↵
[charset=utf-8](#)↵
↵
--↵
Open [WebMail](http://openwebmail.org) Project (<http://openwebmail.org>)↵
↵

Testing between EAI systems with different implementations

Test with AFILIAS (implementation based on sendmail)

From: 伊昭杰@环球电邮.info
[<jyee@ca.afilias.info>](mailto:jyee@ca.afilias.info)

To: [<测试@邮件.postfix.asrc.cn>](mailto:测试@邮件.postfix.asrc.cn)

Inbox: 10 messages unread - 测试@邮件.postfix.asrc.cn - 07/18/2008 11:18:33 am +0800 - utf-8 - Open - Microsoft In...

文件(F) 编辑(E) 查看(V) 收藏(A) 工具(T) 帮助(H)



地址 http://ml.postfix.asrc.cn/cgi-bin/openwebmail/openwebmail-main.pl?action=listmessages&sessionid=%e6%b5%8b%e8%af%95*%e9%82%ae%e4%bb%b6.p 链接

Inbox (10/46)

10 unread / 46 messages / 615KB



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Subject Search

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Saved Move Copy

<input type="checkbox"/>	Sent Date	Sender	Subject	Size	<input type="checkbox"/>
1	07/18/2008 10:26:14 am	伊昭杰@环球电邮.info	Scenario A Testing	1649	<input type="checkbox"/>
2	07/18/2008 10:05:59 am	伊昭杰@环球电邮.info	Scenario A Testing	1692	<input type="checkbox"/>
3	07/18/2008 10:00:35 am	伊昭杰@环球电邮.info	Re: test once without alt-address	3KB	<input type="checkbox"/>
4	07/18/2008 09:59:38 am	伊昭杰@环球电邮.info	Re: test once - with raw header	3KB	<input type="checkbox"/>
5	07/16/2008 12:47:24 pm	伊昭杰@环球电邮.info	Re: test once without alt-address	1836	<input checked="" type="checkbox"/>
6	07/16/2008 12:46:48 pm	伊昭杰@环球电邮.info	Re: test once	1881	<input type="checkbox"/>



中国互联网信息中心

Received from 伊昭杰@环球电邮.info

From jyee@ca.afiliat.info> Fri Jul 18 10:26:14 2008

Return-Path: <伊昭杰@环球电邮.info>

Received: from murder ([unix socket])

by blade1.localdomain (Cyrus v2.2.12) with LMTPA;

Fri, 18 Jul 2008 10:22:04 +0800

X-Sieve: CMU Sieve 2.2

Received: from BMP-346-IDN501.wa.yyz2.afiliat-ops.info (32.124.46-69.q9.net [69.46.124.32])

(using TLSv1 with cipher DHE-RSA-AES256-SHA (256/256 bits))

(No client certificate requested)

by xn--5nQ051N.postfix.asrc.cn (Postfix) with ESMTP id 66CB55C05F7

for <测试@邮件.postfix.asrc.cn>; Fri, 18 Jul 2008 10:22:03 +0800 (CST)

Received: from localhost (localhost [127.0.0.1])

by BMP-346-IDN501.wa.yyz2.afiliat-ops.info (8.14.0/8.14.0) with ESMTP id m6I2QESZ026341

for <测试@邮件.postfix.asrc.cn>; Fri, 18 Jul 2008 02:26:14 GMT

Received: from 206-248-176-170.dsl.teksawy.com

(206-248-176-170.dsl.teksawy.com [206.248.176.170]) by

xn--rcyyg17a174e.info (Horde MIME library) with HTTP; Fri, 18 Jul 2008

02:26:14 +0000

Message-ID: <20080718022614.4ifs1wm800c8os0k@xn--rcyyg17a174e.info>

Date: Fri, 18 Jul 2008 02:26:14 +0000

From: <伊昭杰@环球电邮.info <jyee@ca.afiliat.info>>

To: <测试@邮件.postfix.asrc.cn>

Subject: Scenario A Testing

MIME-Version: 1.0

Content-Type: text/plain;

charset=UTF-8;

DelSp="Yes";

format="flowed"

Content-Disposition: inline

Content-Transfer-Encoding: 8bit

User-Agent: Internet Messaging Program (IMP) H3 (4.1.4)

Status: R

X-Status: A

Hi CNNIC,

Please let me know if you receive this message. Thank!

В а с и л и ч @ м и р о в а я - п о ч т а . i n f o

From Дерек Sat Jul 19 05:46:06 2008

Return-Path: <василич@мировая-почта.info>

Received: from murder ([unix socket])

by blade1.localdomain (Cyrus v2.2.12) with LMTPA;

Sat, 19 Jul 2008 05:41:54 +0800

X-Sieve: CMU Sieve 2.2

Received: from BMP-346-IDN501.wa.yyz2.afilias-ops.info (32.124.46-69.q9.net [69.46.124.32])

(using TLSv1 with cipher DHE-RSA-AES256-SHA (256/256 bits))

(No client certificate requested)

by xn--5nQ051N.postfix.asrc.cn (Postfix) with ESMTP id 960D25C06AD

for <测试@邮件.postfix.asrc.cn>; Sat, 19 Jul 2008 05:41:53 +0800 (CST)

Received: from localhost (localhost [127.0.0.1])

by BMP-346-IDN501.wa.yyz2.afilias-ops.info (8.14.0/8.14.0) with ESMTP id m6lLk6KW010338;

Fri, 18 Jul 2008 21:46:06 GMT

Received: from vgateway.libertyrms.info (vgateway.libertyrms.info

[207.219.45.62]) by xn----7sbbf3axpdif2a3duf.info (Horde MIME library) with

HTTP; Fri, 18 Jul 2008 21:46:06 +0000

Message-ID: <20080718214606.a3kaqfmg0g04wgg@xn----7sbbf3axpdif2a3duf.info>

Date: Fri, 18 Jul 2008 21:46:06 +0000

From: Дерек

Василич<василич@мировая-почта.info <dwilliams@global-email.info>>

To: <测试@邮件.postfix.asrc.cn>

Сс: <василич@мировая-почта.info>

Subject: Привіт, світ!

MIME-Version: 1.0

Content-Type: text/plain;

charset=UTF-8;

DelSp="Yes";

format="flowed"

Content-Disposition: inline

Content-Transfer-Encoding: 8bit

User-Agent: Internet Messaging Program (IMP) H3 (4.1.4)

Status: R

X-Status: A

Привіт, світ!

Hello, world!

Testing between EAI systems with different implementations

Test with TWNIC (implementation based on sendmail)

From: <中文測試@中文.twNIC.tw>

To: <测试@邮件.postfix.asrc.cn

<test@m1.postfix.asrc.cn>>

From 中文測試@中文.twnic.tw Tue Jul 29 00:45:57 2008

Return-Path: <中文測試@中文.twnic.tw>

Received: from murder ([unix socket])

by blade1.localdomain (Cyrus v2.2.12) with LMTPA;

Tue, 29 Jul 2008 00:45:15 +0800

X-Sieve: CMU Sieve 2.2

Received: from xn--fiq228c.twnic.tw (xn--fiq228c.twnic.tw [203.73.24.199])

(using TLSv1 with cipher DHE-RSA-AES256-SHA (256/256 bits))

(No client certificate requested)

by xn--5nQ051N.postfix.asrc.cn (Postfix) with ESMTP id 4A7E35C05C4

for <测试@邮件.postfix.asrc.cn>; Tue, 29 Jul 2008 00:45:13 +0800 (CST)

From: "中文測試" <中文測試@中文.twnic.tw>

To: <测试@邮件.postfix.asrc.cn <test@m1.postfix.asrc.cn>>

Subject: <测试@邮件.postfix.asrc.cn <test@m1.postfix.asrc.cn>>

Date: Tue, 29 Jul 2008 00:45:57 +0800

Message-Id: <20080728164529.M95349@xn--fiq228c.twnic.tw>

X-Mailer: OpenWebMail 2.52 20060502

X-OriginatingIP: 130.129.22.116 (中文測試)

MIME-Version: 1.0

Content-Type: text/plain;

charset=utf-8

Status: R

TVNIC EAI-aware Mail Service

實驗.tw: <http://xn--sdt066l.tw>

Simple Live DEMO

- Implementation and Tests
 - CNNIC TWNIC AFILIAS NIDA JPRS
 - MICROSOFT is planning to implement EAI in its new version of windows products
- Promote the commercial company to use it
 - China will publish the EAI standard based on EAI RFCs
- Promote the users to use it
 - Many internet users inquire this problem
- Make other drafts of the EAI WG to become RFCs
 - IMAP draft begins IESG last call
- [your native character name]@IDN

Since key EAI RFCs have been published by IETF, please request your email service provider to support these kind of email addresses

اختبار@اختبار.eg

परीक्षा@उदाहरण.in

例え@例え.jp

실례@실례.kr

用户@中文.cn

été@Économie.fr

teuer@Schön.de

Q&A!

yaojk@cnnic.cn



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