在14.X中配置UTF-8(IDN)域名

目錄

簡介

本文描述如何配置和使用14.x代碼中新增到安全電子郵件網關(ESA)和安全電子郵件雲網關(CES)的新UTF-8國際域名(IDN)功能

作者：Anvitha Prabhu和Libin Varghese，思科TAC工程師。

需求

思科建議您瞭解以下主題：

ESA概念和配置

採用元件

本文檔中的資訊基於AsyncOS for ESA 14.0及更高版本。

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。

14.x支援的語言，用於IDN支援

印度地區語言

印地語、泰米爾語、泰盧固語、卡納達語、 馬拉蒂、旁遮普語、馬拉雅拉姆語、孟加拉語、 古吉拉特語、烏爾都語、阿薩姆語、尼泊爾語、 曼古拉，博多，多格里、克什米爾省、孔卡尼省、 馬蒂利、曼尼普里、奧里耶、梵語、桑塔利、信德語、圖盧。

歐洲/亞洲語言

法語、俄語、日語、德語、烏克蘭語、韓語、西班牙語、義大利語、中文、荷蘭語、泰語、阿拉伯語、哈薩克語

IDN支援的格式

- 完整IDN域：अनअन्वतिा@जीमेल.कोम ಅನ್ವಿತಾ@ಯಾಹೂ.ಜಲಿಂತ್ ,
- 部分IDN域： .कोम ，而IDN域ID為IDN域IDN域IDN域IDN域IDN域IDN域IDN域IDN域IDN域IDN域IDN域IDN域IDN域IDN域IDN域IDN域域IDಯಾಹೂ.ಜಲಿಂತ್域域IDN域域域域域域
- ASCII、IDN組合：test@जीमेल.कोम

哪裡支援IDN?

SMTP 路由

導航到Network -> SMTP Routes -> **Add Route** -> **Add the IDN domain** -> **Submit-> Commit**

DNS域

我們可以新增或編輯DNS伺服器中的IDN域。

導航到Network -> DNS -> Edit settings -> **Add** the IDN **domain**(在「alternate DNS server overrides」下)

附註:

·公共IDN域由公共/Internet根DNS伺服器解析。

·本地IDN域:在本地DNS伺服器中,使用與IDN域等效的punycode格式記錄建立區域檔案[例如:xn - 2scrj9c.xn - 2scrj9c.]處理本地IDN域名的解析度。

監聽程式 — RAT/HAT

我們可以在以下位置使用IDN支援:

- 入站/出站偵聽器 — >新增/編輯預設域中的IDN域
- HAT/RAT ->在HAT/RAT中新增/編輯IDN域
- 使用IDN匯入/匯出HAT/RAT表

要使用IDN配置收件人訪問表(RAT),請導航至Mail policies -> Recipient Access Table(RAT),然後按一下Add Recipient -> Add the IDN Domain -> Submit -> Commit

Recipient Access Table Overview

Mode —Cluster: ESA_BETA_CLUSTER

Change Mode... ⊕

▷ Centralized Management Options

Overview for Listener:	Incoming ⊕		Items per page	20 ⊕

Add Recipient...   Clear All Entries   Import RAT...

Order	Recipient Address	Default Action	All ☐ Delete
1	humaaralab.com	Accept	☐
2	doosralab.com	Accept	☐
3	जीमेल.कोम	Accept	☐
	All Other Recipients	Reject	

Edit Order...   Export RAT...   Delete

要配置具有IDN域的主機訪問表(HAT)發件人組，請導航到Mail policies -> HAT Overview -> Add new Sender group -> **Submit and add senders** with IDN hostname -> **Submit** -> **Commit**

Sender Group: IDN_Support - Incoming

Mode —Cluster: ESA_BETA_CLUSTER

Change Mode... ⊕

▷ Centralized Management Options

Sender Group Settings

Name:	IDN_Support
Order:	9
Comment:	IDN Support
Policy:	ACCEPTED
SBRS (Optional):	Not in use
External Threat Feed (Optional): For IP lookups only	None
DNS Lists (Optional):	None
Connecting Host DNS Verification:	None Included

<< Back to HAT Overview   Edit Settings...

Find Senders

Find Senders that Contain this Text: ⑦		Find

Sender List: Display All Items in List	Items per page	20 ⊕

Add Sender...

Sender	Comment	All ☐ Delete
जीमेल.कोम	idn sender	☐

<< Back to HAT Overview   Delete

附註：您可以按照相同的流程編輯任何發件人組並新增IDN域。

傳入/傳出郵件策略 — 發件人/收件人

要將傳入郵件策略配置為處理IDN，請導航至**郵件策略** -> **Add Policy** -> Provide policy name-> **Add Users**

您可以選擇在發件人/收件人兩個中使用IDN域，也可以嘗試任意組合 — >提交 — >提交

要將傳入郵件策略配置為處理IDN，請導航至**郵件策略** -> **Add Policy** -> Provide policy name-> **Add Users**

您可以選擇在發件人/收件人兩個中使用IDN域，也可以嘗試任意組合 — >提交 — >提交

Incoming Mail Policies

Add User

○ Any Sender
● Following Senders
○ Following Senders are Not

Email Address:

```
@example.com
```

(e.g. user@example.com, user@, @example.com, @.example.com)

LDAP Group:

Query: LDAP.group

Group: [   ] [Add Group] [Remove]

[   ]

○ Any Recipient
● Following Recipients

```
user@example.com
```

(e.g. user@example.com, user@, @example.com, @.example.com)

☐ Cisco Security Awareness not configured.

LDAP Group:

Query: LDAP.group

Group: [   ] [Add Group] [Remove]

[   ]

☐ Following Recipients are Not

Email Address:

[   ]

(e.g. user@example.com, user@, @example.com, @.example.com)

LDAP Group:

Query: LDAP.group

Group: [   ] [Add Group] [Remove]

[   ]

[Cancel]   [OK]

附註：您可以對傳出郵件策略執行相同的過程。

異常表

要將IDN域名新增到例外表，請導航至

郵件策略 — > 例外表-> Add Sender Verification Exception -> Add the IDN Domains -> Submit-> Commit

Sender Verification Exception Table

Success — Entry was added

Mode —Cluster: ESA_BETA_CLUSTER

▷ Centralized Management Options

Change Mode...

Find Sender Verification Exception

Search for Email Address: ? [ ] Find

Sender Verification Exception Table

Add Sender Verification Exception... | Clear All Sender Verification Exceptions

Order	Exception	Behavior	SMTP Response	Delete
1	@जीमेल.कोम	Allow	N/A	🗑

通訊清單

要將IDN域名新增到地址清單，請導航至

Mail Policy -> Address List -> Add address List -> Enter the IDN domains in the box -> Submit-> Commit

Add Address List

Mode —Cluster: ESA_BETA_CLUSTER

▷ Centralized Management Options

Change Mode...

New Address List Details

Address List Name: IDN-Support

Description: IDN-Support-test

List Type:
- ○ Full Email Addresses only
- ○ Domains only
- ○ IP Addresses only
- ● All of the above

Addresses: जीमेल.कोम, ಅನ್ವಿತಾ@ಯಾಹೂ.ಪೊತೆ, @ @ಮಾಯುತ್ತರ

e.g.: user@example.com, user@, @example.com, @[1.2.3.4], @.example.com

Cancel | Submit

目的地控制

要將IDN域名新增到目標控制，請導航至

郵件策略 — > Destination Controls -> Add Destination ->**您可以新增**IDN**域名**-> Submit-> Commit

Destination Controls

Success — Your changes have been committed.

Mode —**Cluster: ESA_BETA_CLUSTER**

Change Mode...

▷ Centralized Management Options

Destination Control Table

Items per page **20**

Add Destination...

Import Table

Domain ▲	IP Address Preference	Destination Limits	TLS Support	DANE Support ^	Bounce Verification *	Bounce Profile	All Delete
doosralab.com	Default	Default connection limit, 50 messages per connection, Default recipient limit	Required	Default	Default	Default	☐
humaaralab.com	Default	Default connection limit, 50 messages per connection, Default recipient limit	Required	Default	Default	Default	☐
जीमेल.कोम	Default	500 concurrent connections, 50 messages per connection, Default recipient limit	Default	Default	Default	Default	☐
Default	IPv6 Preferred	500 concurrent connections, 50 messages per connection, No recipient limit	None	None	Off	Default	

Export Table

Delete

* Bounce Verification settings apply only if bounce verification address tagging is in use. See *Mail Policies > Bounce Verification*.
^ DANE will not be enforced for domains that have SMTP Routes configured.

Global Settings

Certificate:	Client-Cert
Send an alert when a required TLS connection fails:	Enabled

Edit Global Settings...

退回配置檔案

退回和警告郵件的收件人可以在「退回配置檔案」下配置IDN域名。

導航至Network -> Bounce Profiles -> Add Bounce Profile ->輸入名稱 — >為退回配置檔案配置值 — >為接收人傳送退回和警告消息 — >選擇Alternate address，您可以選擇使用IDN域地址。

LDAP

現在，您可以通過IDN域名進行LDAP接受/組查詢，如下圖所示。

本地垃圾郵件隔離區

您可以看到本地SPM隔離區在使用者電子郵件地址/域/主題中顯示IDN域名

	Messages Received:	○ Today ● Last 7 days ○ Date Range: [ ] and [ ]
	Where	From ▾	Contains ▾ : [ ]
	Envelope Recipient ⓘ	Is ▾ : [ ]

[Clear Search]   14 items found   Search

Search Results   Items per page 25 ▾

Displaying 1 — 14 of 14 items.

Release   Delete

☐	From	Envelope Recipient	To	Subject	Date ▾	Size
☐		anvitha@doosralab.com		[SUSPICIOUS MESSAGE] this is to test policy	10 Feb 2021 16:30 (GMT -06:00)	3.6K
☐	→	अनअन्विता2@जीमेल.कोम		Please read as this is very என்று நம்புகிறேன் for both the countries. ←	09 Feb 2021 21:49 (GMT -06:00)	7.3K
☐	→	あなたは誰ですか2@ヤフー.com		this is japanese test 今は17時38分です	09 Feb 2021 21:37 (GMT -06:00)	3.5K
☐		你是誰2@明天.在		Please read as this is very என்று நம்புகிறேன் for both the countries.	09 Feb 2021 21:18 (GMT -06:00)	3.4K
☐	→	你是誰2@明天.在		Please read as this is very என்று நம்புகிறேன் for both the countries.	09 Feb 2021 17:13 (GMT -06:00)	7.6K
☐		anvitha@humaaralab.com		Please read as this is very என்று நம்புகிறேன் for both the countries.	09 Feb 2021 17:11 (GMT -06:00)	8.8K
☐		anvitha@humaaralab.com		Please read as this is very என்று நம்புகிறேன் for both the countries رہی .	09 Feb 2021 17:02 (GMT -06:00)	4.7K
☐		anvitha@humaaralab.com		Please read as this is very என்று நம்புகிறேன் for both the countries.	09 Feb 2021 17:00 (GMT -06:00)	5.1K
☐		anvitha@humaaralab.com		Please read as this is very ಮಾಡುತ್ತಿದ್ದೀರಿ ಎಂದು ಭಾವಿಸುತ್ತೇನೆ for both the countries.	09 Feb 2021 16:54 (GMT -06:00)	5.2K
☐		anvitha@doosralab.com		this is a test	09 Feb 2021 16:01 (GMT -06:00)	3.3K
☐		anvitha@humaaralab.com		Please read as this is very என்று நம்புகிறேன் for both the countries رہی .	09 Feb 2021 15:49 (GMT -06:00)	8.1K
☐		anvitha@humaaralab.com		Please read as this is very என்று நம்புகிறேன் for both the countries.	09 Feb 2021 15:41 (GMT -06:00)	8.8K
☐		anvitha@humaaralab.com		Please read as this is very आशा for both the countries.	08 Feb 2021 21:53 (GMT -06:00)	5.0K
☐		anvitha@humaaralab.com		Please read as this is very आशा for both the countries.	08 Feb 2021 21:47 (GMT -06:00)	3.9K

Release   Delete

附註：本地PVO隔離區顯示與垃圾郵件隔離區相似的行為。

驗證和疑難排解

1)ESA和SMA（安全郵件和網路管理器）上的報告現在支援IDN。我們可以在報告中看到採用IDN格式的使用者名稱/域/電子郵件地址

導覽至Monitor -> Internal Users
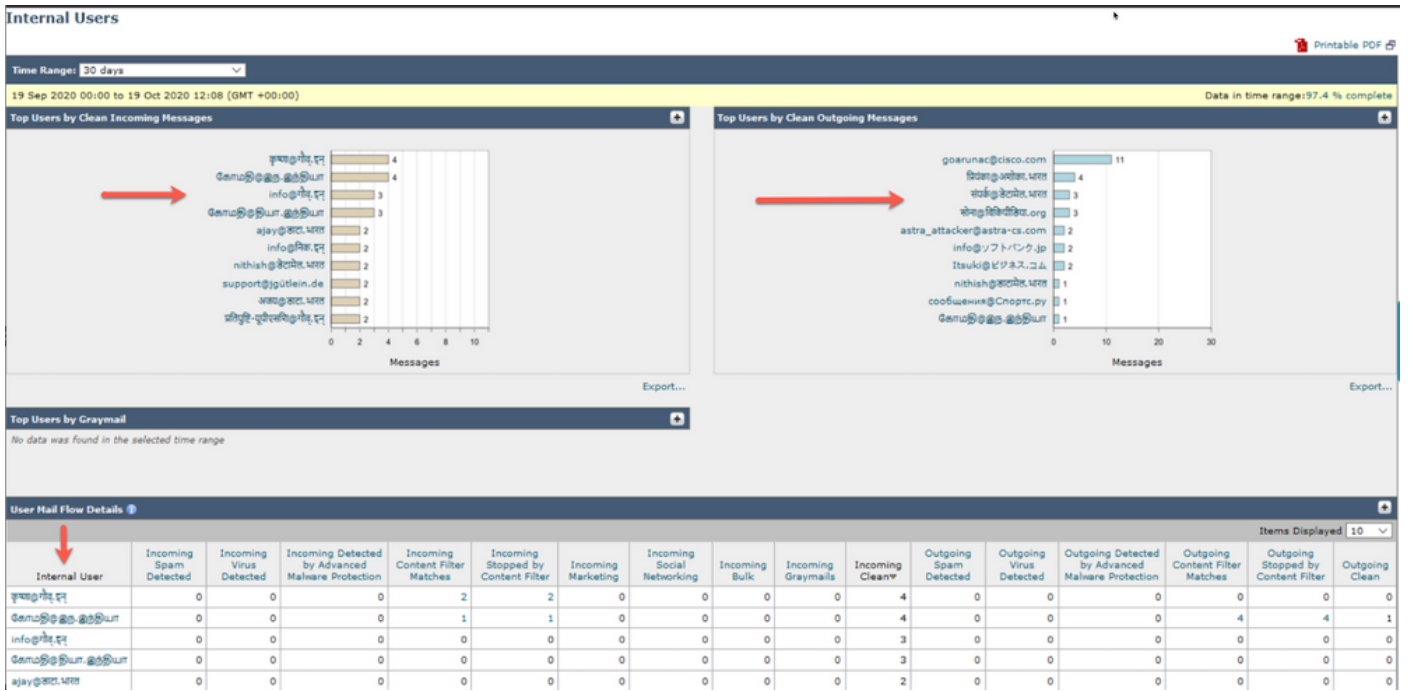
2)在**郵件跟蹤**中，我們可以看到IDN域名，也可以使用IDN域/使用者名稱/電子郵件地址進行過濾

3)使用CLI命令grep或tail檢視「**mail_logs**」，我們將在日誌中看到IDN域

```
Mon Feb  8 21:47:11 2021 Info: Start MID 23569633 ICID 148853
Mon Feb  8 21:47:11 2021 Info: MID 23569633 ICID 148853 From:
```

```
            <@.>




Mon Feb  8 21:47:19 2021 Info: MID 23569633 ICID 148853 RID 0 To: <test@lab.com>
Mon Feb  8 21:47:52 2021 Info: MID 23569633 Subject 'Please read as this is very  for both the
countries.'
Mon Feb  8 21:47:52 2021 Info: MID 23569633 SDR: Domains for which SDR is requested: reverse DNS
host: sample.host.com, helo: lab.com, env-from: ., header-from: Not Present, reply-to: Not
Present
Mon Feb  8 21:47:53 2021 Info: MID 23569633 SDR: Consolidated Sender Reputation: Tainted, Threat
Category: N/A, Suspected Domain(s) : lab.com. Youngest Domain Age: 3 months 29 days for domain:
lab.com
Mon Feb  8 21:47:53 2021 Info: MID 23569633 SDR: Tracker Header :
87dSxFfNYdSiOahrxSUZFOrdpenKiF6J2uKiPf+SFKCtj52hNCpe6LDQ8UFAliGnUDA7FsuXLvHTcaATt6AKG4PWLpwEeo/d
cIPBUOdxB48=
Mon Feb  8 21:47:53 2021 Info: MID 23569633 ready 605 bytes from


            <@.>




Mon Feb  8 21:47:53 2021 Info: MID 23569633 matched all recipients for per-recipient policy
DEFAULT in the inbound table
Mon Feb  8 21:47:53 2021 Info: MID 23569633 interim verdict using engine: CASE spam positive
Mon Feb  8 21:47:53 2021 Info: MID 23569633 using engine: CASE spam positive
Mon Feb  8 21:47:53 2021 Info: ISQ: Tagging MID 23569633 for quarantine
Mon Feb  8 21:47:53 2021 Info: MID 23569633 interim AV verdict using McAfee CLEAN
Mon Feb  8 21:47:53 2021 Info: MID 23569633 interim AV verdict using Sophos CLEAN
Mon Feb  8 21:47:53 2021 Info: MID 23569633 antivirus negative
Mon Feb  8 21:47:53 2021 Info: MID 23569633 AMP file reputation verdict : SKIPPED (no attachment
in message)
Mon Feb  8 21:47:53 2021 Info: MID 23569633 using engine: GRAYMAIL negative
Mon Feb  8 21:47:53 2021 Info: MID 23569633 Custom Log Entry: SDR Age is less than 1 Year
Mon Feb  8 21:47:53 2021 Info: MID 23569633 Outbreak Filters: verdict negative
Mon Feb  8 21:47:53 2021 Info: MID 23569633 Message-ID '<d35764$mf971@esa1.lab.com>'
Mon Feb  8 21:47:53 2021 Info: MID 23569633 queued for delivery
Mon Feb  8 21:47:53 2021 Info: New SMTP DCID 250225 interface 10.0.202.17 address 10.0.201.5
port 6025
Mon Feb  8 21:47:53 2021 Info: DCID 250225 STARTTLS command not supported
Mon Feb  8 21:47:53 2021 Info: Delivery start DCID 250225 MID 23569633 to RID [0] to offbox
IronPort Spam Quarantine
Mon Feb  8 21:47:53 2021 Info: Message done DCID 250225 MID 23569633 to RID [0] (external
quarantine)
Mon Feb  8 21:47:53 2021 Info: MID 23569633 RID [0] Response 'ok:  Message 27293054 accepted'
Mon Feb  8 21:47:53 2021 Info: Message finished MID 23569633 done
Mon Feb  8 21:47:58 2021 Info: DCID 250225 close
```

相關資訊

- [Cisco Email Security Appliance — 最終使用手冊](#)
- [技術支援與文件 - Cisco Systems](#)