

在14.X中配置UTF-8(IDN)域名

目录

[简介](#)

[要求](#)

[使用的组件](#)

[14.x中支持的语言，用于IDN支持](#)

[印度地区语言](#)

[欧洲/亚洲语言](#)

[IDN支持的格式](#)

[IDN在哪里受支持？](#)

[SMTP路由](#)

[DNS域](#)

[侦听器 — RAT/HAT](#)

[传入/传出邮件策略 — 发件人/收件人](#)

[异常表](#)

[地址列表](#)

[目标控制](#)

[退回配置文件](#)

[LDAP](#)

[本地垃圾邮件隔离区](#)

[验证和故障排除](#)

[相关信息](#)

简介

本文档介绍如何配置和使用在14.x代码中添加到安全邮件网关(ESA)和安全邮件云网关(CES)的新UTF-8国际域名(IDN)功能

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

要求

Cisco 建议您了解以下主题：

ESA概念和配置

使用的组件

本文档中的信息基于AsyncOS for ESA 14.0及更高版本。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

14.x中支持的语言，用于IDN支持

印度地区语言

印地语、泰米尔语、泰卢固语、卡纳达语、马拉蒂、旁遮普语、马拉雅拉姆语、孟加拉语、古吉拉特语、乌尔都语、阿萨姆语、尼泊尔语、孟加拉，波多，多格里、克什米尔、康卡尼、迈蒂利、曼尼普里、奥里亚、梵语、桑塔利、信德、图鲁。

欧洲/亚洲语言

法语、俄语、日语、德语、乌克兰语、韩语、西班牙语、意大利语、中文、荷兰语、泰语、阿拉伯语、哈萨克语

IDN支持的格式

- 完整IDN域：अनअन्वति@जीमेल.कोम,ಅನ್ವತಿ@ಯಾಹೂ.ಜ್ಞಾತೆ
- 部分IDN域：.कोम,ಯಾಹೂ.ಜ್ಞಾತೆ
- ASCII、IDN组合：测试@जीमेल.कोम

IDN在哪里受支持？

SMTP路由

导航至“网络” —>“SMTP路由”->“添加路由”->“添加IDN域” —> “提交”->

Mode —Cluster: ESA_BETA_CLUSTER Change Mode...

Centralized Management Options

SMTP Route Settings

Receiving Domain: ?	जीमेल.कोम		
Destination Hosts:	Priority ?	Destination ?	Port
	0	10.1.1.1	25
<small>(Hostname, IPv4 or IPv6 address.)</small>			

Outgoing SMTP Authentication: No outgoing SMTP authentication profiles are configured. See Network > SMTP Authentication

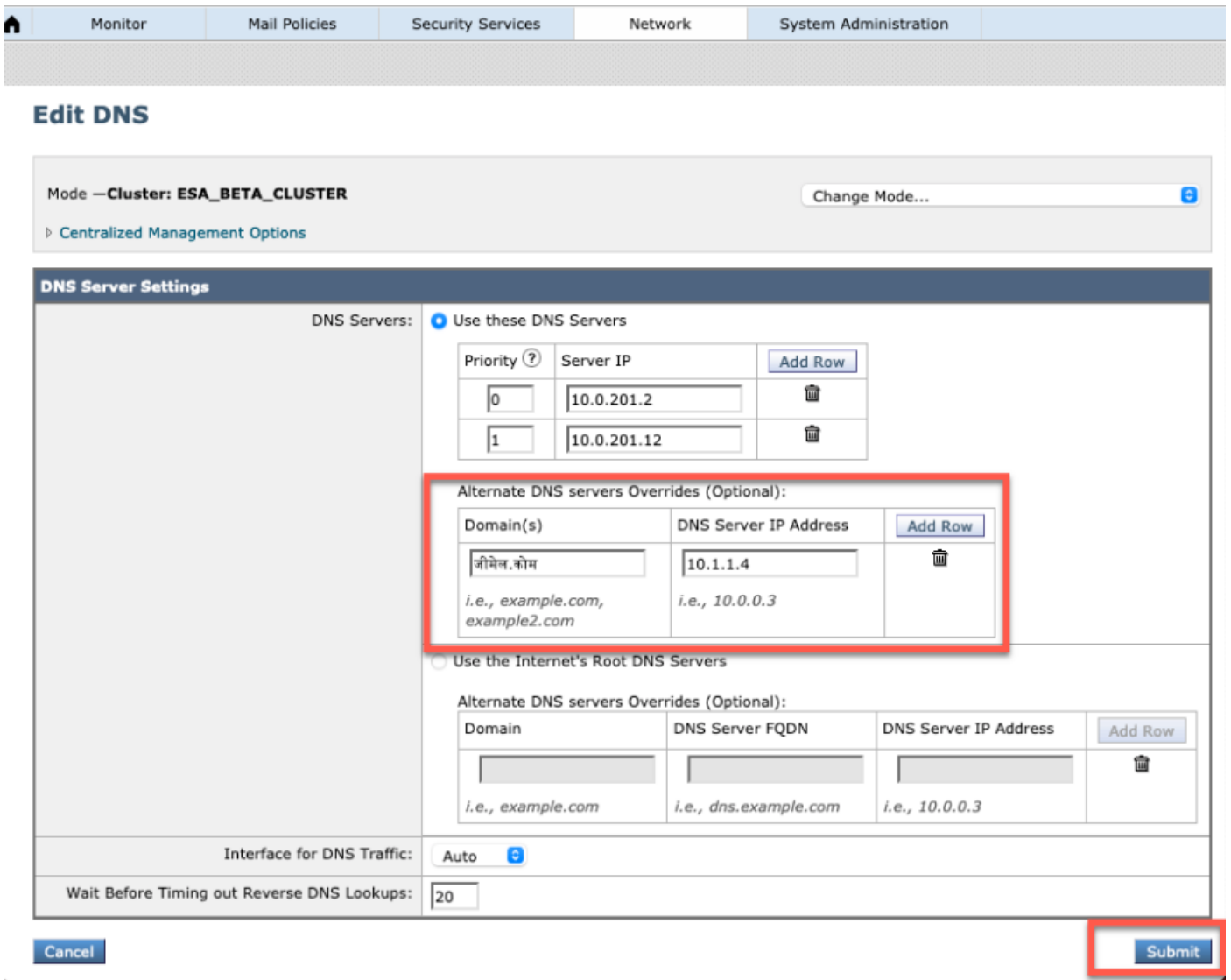
Note: DANE will not be enforced for domains that have SMTP Routes configured.

Cancel Submit

DNS域

我们可以在DNS服务器中添加或编辑IDN域。

导航至“Network -> DNS -> Edit settings -> ”下的“Alternate DNS server overrides”下的“Add the IDN domain”。



NOTE:

·公共IDN域由公共/Internet根DNS服务器解析。

·本地IDN域名：在本地DNS服务器中，创建区域文件，其中记录采用相当于IDN域的二进制代码格式[例如：xn - 2scrj9c.xn - 2scrj9c.]，以处理本地IDN域名的解析。

侦听器 — RAT/HAT

我们可以在以下方面使用IDN支持：

- 入站/出站侦听程序 —>在默认域中添加/编辑IDN域
- HAT/RAT ->在HAT/RAT中添加/编辑IDN域
- 使用IDN导入/导出HAT/RAT表

要使用IDN配置收件人访问表(RAT)，请导航到邮件策略-> 收件人访问表(RAT)，然后单击添加收件人 —>添加IDN域 —>提交 —>提交

Recipient Access Table Overview

Success — Recipient Access Table entry for "जीमेल.कोम" was added.

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	<input type="checkbox"/>
2	doosralab.com	Accept	<input type="checkbox"/>
3	जीमेल.कोम	Accept	<input type="checkbox"/>
All Other Recipients		Reject	

[Edit Order...](#) [Export RAT...](#) Delete

要配置主机访问表(HAT)发件人组 (包含IDN域) , 请导航至邮件策略-> HAT概述 ->添加新发件人组 —> 提交并添加具有IDN主机名的发件人 —> 提交-> 提交-> 提交

Sender Group: IDN_Support - Incoming

Success — Sender "जीमेल.कोम" was added.

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): <i>For IP lookups only</i>	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: Find

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

[Add Sender...](#)

Sender	Comment	All Delete
जीमेल.कोम	idn sender	<input type="checkbox"/>

[<< Back to HAT Overview](#) Delete

NOTE:您可以按照相同的流程编辑任何发件人组并添加IDN域。

传入/传出邮件策略 — 发件人/收件人

要配置传入邮件策略以处理IDN，请导航至“邮件策略”->“添加策略”->“提供策略名称”->“添加用户”

您可以选择在发件人/收件人中使用IDN域，或尝试任意组合 —>提交 —>提交

Incoming Mail Policies

Mode --Cluster: ESA_BETA_CLUSTER

Change Mode...

> Centralized Management Options

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

Add Incoming Mail Policy

Mode —Cluster: ESA_BETA_CLUSTER Change Mode...

Centralized Management Options

Add Policy

Policy Name:
(e.g. my IT policy)

Insert Before Policy:

Users

Sender	Recipients	Edit:	Delete
@जीमेल.कॉम	example@example.com	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

NOTE:您可以按照相同的流程处理传出邮件策略。

异常表

要将IDN域名添加到例外表，请导航至

邮件策略 —>异常表->添加发件人验证异常-> 添加IDN域 —> 提交-> 提交

Add Sender Verification Exception

Mode —Cluster: ESA_BETA_CLUSTER Change Mode...

Centralized Management Options

Sender Verification Exception

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

Order: (of 1)

Behavior: Allow
 Reject

SMTP Code:

SMTP Text:

Sender Verification Exception Table

Success — Entry was added

Mode —Cluster: ESA_BETA_CLUSTER

Change Mode...

Centralized Management Options

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	

地址列表

要将IDN域名添加到地址列表，请导航至

邮件策略 —> 地址列表 —> 添加地址列表-> 在框中输入IDN域-> 提交-> 提交

Add Address List

Mode —Cluster: ESA_BETA_CLUSTER

Change Mode...

Centralized Management Options

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

Cancel

Submit

Address Lists

Mode — Cluster: **ESA_BETA_CLUSTER** Change Mode...

▸ Centralized Management Options

Address Lists

[Add Address List...](#)

Address List Name	Description	Used for	Addresses	All <input type="checkbox"/> Delete
IDN-Support	IDN-Support-test		(3) ಅಭ್ಯಾಸ@ಯಾಹೂ.ಬಿಡಿ, @ಜಿಮೆಲ್.ಕೊಮ,...	<input type="checkbox"/>

[Delete](#)

目标控制

要将IDN域名添加到目标控制，请导航至

邮件策略 —> 目标控制 —> 添加目标->您可以添加IDN域名 —> 提交-> 提交

Monitor Mail Policies Security Services Network System Administration

Add Destination Controls

Mode — Cluster: **ESA_BETA_CLUSTER** Change Mode...

▸ Centralized Management Options

Destination Controls

Destination:	<input type="text" value="ಜಿಮೆಲ್.ಕೊಮ"/>
IP Address Preference:	Default (IPv6 Preferred)
Limits:	Concurrent Connections: <input type="radio"/> Use Default (500) <input checked="" type="radio"/> Maximum of <input type="text" value="500"/> (between 1 and 1,000)
	Maximum Messages Per Connection: <input type="radio"/> Use Default (50) <input checked="" type="radio"/> Maximum of <input type="text" value="50"/> (between 1 and 1,000)
	Recipients: <input checked="" type="radio"/> Use Default (No Limit) <input type="radio"/> Maximum of <input type="text" value="0"/> per <input type="text" value="60"/> minutes <i>Number of recipients between 0 and 1,000,000,000 per number of minutes between 1 and 60</i>
	Apply limits: Per Secure Email hostname: <input checked="" type="radio"/> System Wide <input type="radio"/> Each Virtual Gateway <i>(recommended if Virtual Gateways are in use)</i>
TLS Support:	Default (None)
DANE Support:	<input type="text" value="Default (None)"/>
Bounce Verification:	Perform address tagging: <input checked="" type="radio"/> Default (No) <input type="radio"/> No <input type="radio"/> Yes <i>Applies only if bounce verification address tagging is in use. See Mail Policies > Bounce Verification.</i>
Bounce Profile:	Default + <i>Bounce Profile can be configured at Network > Bounce Profiles.</i>

Note: DANE will not be enforced for domains that have SMTP Routes configured.

[Cancel](#) [Submit](#)

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

Domain ▲	IP Address Preference	Destination Limits	TLS Support	DANE Support ^	Bounce Verification *	Bounce Profile	All <input type="checkbox"/> Delete
doosralab.com	Default	Default connection limit, 50 messages per connection, Default recipient limit	Required	Default	Default	Default	<input type="checkbox"/>
humaaralab.com	Default	Default connection limit, 50 messages per connection, Default recipient limit	Required	Default	Default	Default	<input type="checkbox"/>
जिमेिल.कोम	Default	500 concurrent connections, 50 messages per connection, Default recipient limit	Default	Default	Default	Default	<input type="checkbox"/>
Default	IPv6 Preferred	500 concurrent connections, 50 messages per connection, No recipient limit	None	None	Off	Default	

[Add Destination...](#) [Import Table](#)

[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...](#)

退回配置文件

退回邮件和警告邮件的收件人可以在退回配置文件中配置IDN域名。

导航至网络 -> 退回配置文件 -> 添加退回配置文件 -> 输入名称 —> 配置退回配置文件的值 —> 为退回邮件和警告邮件的收件人 —> 选择替代地址，然后您可以选择使用IDN域地址。

Monitor Mail Policies Security Services Network System Administration

Add Bounce Profile

Mode — Cluster: ESA_BETA_CLUSTER Change Mode...

Centralized Management Options

Add Bounce Profile

Profile Name:

Maximum Number of Retries: (between 0 and 10000)

Maximum Time in Queue: seconds (between 0 and 3000000)

Initial Time to Wait per Message: seconds (between 60 and 86400)

Maximum Time to Wait per Message: seconds (between 60 and 86400)

Hard Bounce and Delay Warning Messages: Send Hard Bounce Messages:

Use Default (Yes) Yes No

Use DSN format for bounce messages:

Use Default (Yes) Yes No

Message Composition

Message Subject:

Parse DSN "Status" field from bounce responses: Use Default (No) Yes No

Notification Template: Bounce Notification Template can be defined at Mail Policies > Text Resources.

Message Language	Template	Preview	Delete
Default	System Generated		

[Add Row](#)

Send Delay Warning Messages:

Use Default (No) Yes No

Message Composition

Message Subject:

Notification Template: Bounce Notification Template can be defined at Mail Policies > Text Resources.

Message Language	Template	Preview	Delete
Default	System Generated		

[Add Row](#)

Minimum Interval Between Messages: seconds

Maximum Number of Messages to Send:

Recipient for Bounce and Warning Messages:

Message sender

Alternate:

Use Domain Key Signing for Bounce and Delay Messages:

Use Default (No) Yes No

There is no signing profile matching bounce from address MAILER-DAEMON@_NOTSET_. Bounce messages will not be signed until you create appropriate signing profile.

[Cancel](#) [Submit](#)

LDAP

您现在可以使用IDN域名进行LDAP接受/组查询，如图所示。

Edit User

Any Sender
 Following Senders
 Following Senders are Not

Email Address:

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

LDAP Group:
Query:

Group: ^

Any Recipient
 Following Recipients

▾

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

Cisco Security Awareness not configured.

LDAP Group:
Query:

Group: ^

本地垃圾邮件隔离区

您可以看到本地SPM隔离区在用户电子邮件地址/域/主题中显示IDN域名

Search

Note: For best performance your search should contain an envelope recipient.

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](#)

<input type="checkbox"/>	From	Envelope Recipient	To	Subject	Date	Size
<input type="checkbox"/>		anvitha@doosralab.com		[SUSPICIOUS MESSAGE] this is to test policy	10 Feb 2021 16:30 (GMT -06:00)	3.6K
<input type="checkbox"/>		ਅਨਅਵਿਠਾ2@ਜੀਮੇਲ.ਕੋਮ		Please read as this is very என்று நம்புகிறேன் for both the countries.	09 Feb 2021 21:49 (GMT -06:00)	7.3K
<input type="checkbox"/>		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
<input type="checkbox"/>		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
<input type="checkbox"/>		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
<input type="checkbox"/>		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
<input type="checkbox"/>		anvitha@humaaralab.com		Please read as this is very என்று நம்புகிறேன் for both the countries .	09 Feb 2021 17:02 (GMT -06:00)	4.7K
<input type="checkbox"/>		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
<input type="checkbox"/>		anvitha@humaaralab.com		Please read as this is very மூலத்திலிருந்து என்று பாவித்துவீ for both the countries.	09 Feb 2021 16:54 (GMT -06:00)	5.2K
<input type="checkbox"/>		anvitha@doosralab.com		this is a test	09 Feb 2021 16:01 (GMT -06:00)	3.3K
<input type="checkbox"/>		anvitha@humaaralab.com		Please read as this is very என்று நம்புகிறேன் for both the countries .	09 Feb 2021 15:49 (GMT -06:00)	8.1K
<input type="checkbox"/>		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
<input type="checkbox"/>		anvitha@humaaralab.com		Please read as this is very आशा for both the countries.	08 Feb 2021 21:53 (GMT -06:00)	5.0K
<input type="checkbox"/>		anvitha@humaaralab.com		Please read as this is very आशा for both the countries.	08 Feb 2021 21:47 (GMT -06:00)	3.9K

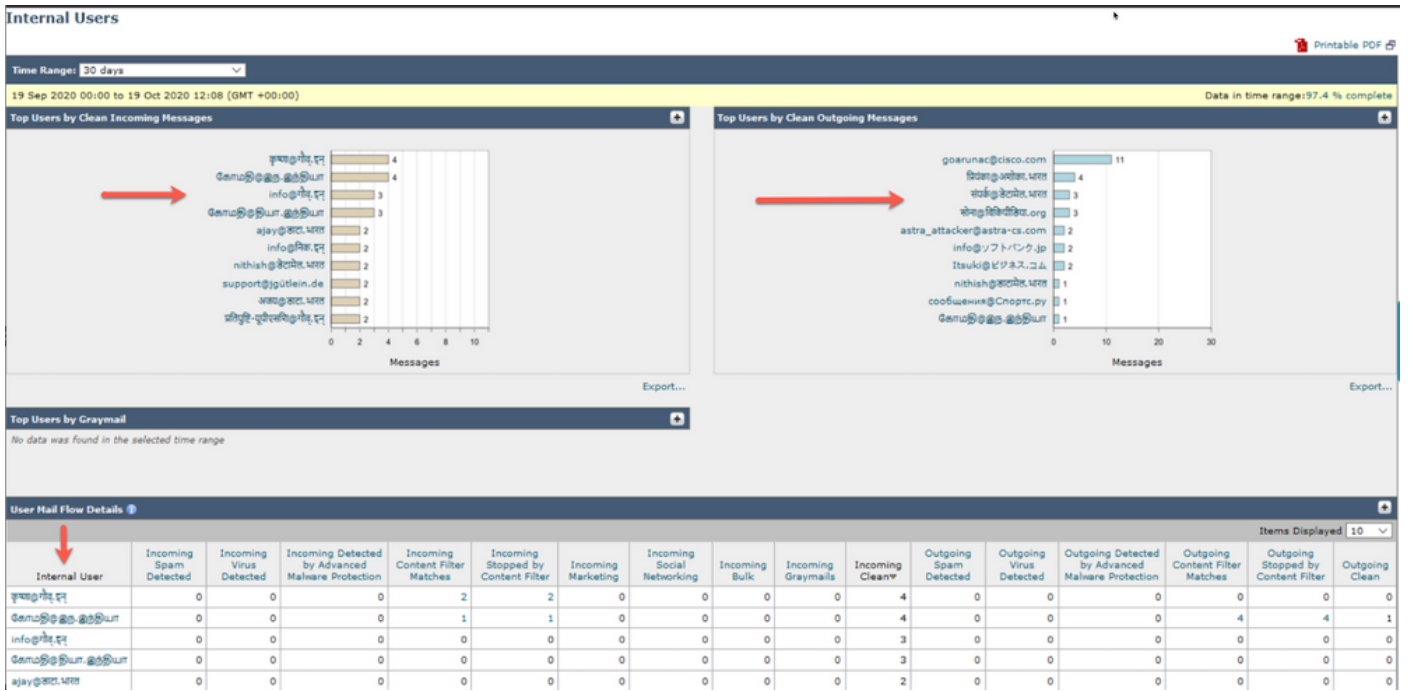
[Release](#) [Delete](#)

NOTE:本地PVO隔离区显示与垃圾邮件隔离区类似的行为。

验证和故障排除

1)有关ESA和SMA (安全邮件和Web管理器)的报告现在支持IDN。我们可以在报告中看到IDN格式的用户名/域/电子邮件地址

导航至监控->内部用户



2)在邮件跟踪中，我们可以看到IDN域名，也可以使用IDN域名/用户名/电子邮件地址进行过滤

Search

Available Time Range: 16 Jun 2020 18:00 to 12 Feb 2021 08:19 (GMT -06:00) Data in time range: 87.98% complete

Envelope Sender: Contains

Envelope Recipient:

Subject:

Message Received: Last Day Last Week Custom Range

Start Date: Time: and End Date: Time: (GMT -06:00)

Generated: 12 Feb 2021 08:21 (GMT -06:00) Export All... | Export...

Results Items per page 20

Displaying 1 — 15 of 15 items.

1	11 Feb 2021 13:42:13 (GMT -06:00)	MID: 23579661	HOST: ESA1-EFT (10.0.202.17)	Show Details
SENDER: அனீதா@யோகூ.யோதே				
RECIPIENT: anvitha@humaaralab.com				
SUBJECT: Please read as this is very [REDACTED]				
LAST STATE: Message 23579661 to anvitha@humaaralab.com received remote SMTP respons:				
2	11 Feb 2021 10:13:55 (GMT -06:00)	MID: 23579651	HOST: ESA1-EFT (10.0.202.17)	Show Details
SENDER: அனீதா@யோகூ.யோதே				
RECIPIENT: anvitha@humaaralab.com				
SUBJECT: Please read as this is very [REDACTED]				
LAST STATE: Message 23579651 to anvitha@humaaralab.com received remote SMTP respons:				
3	09 Feb 2021 17:09:49 (GMT -06:00)	MID: 23570342	HOST: ESA1-EFT (10.0.202.17)	Show Details
SENDER: அனீதா@யோகூ.யோதே				
RECIPIENT: anvitha@humaaralab.com				
SUBJECT: Please read as this is very [REDACTED]				
LAST STATE: A new message 23570347 was generated to handle bounce of message 2357034				
4	09 Feb 2021 16:59:11 (GMT -06:00)	MID: 23570318	HOST: ESA1-EFT (10.0.202.17)	Show Details

3)使用CLI命令grep或tail查看“mail_logs”，并在日志中看到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

相关信息

- [思科邮件安全设备 — 最终用户指南](#)
- [技术支持和文档 - Cisco Systems](#)