

# 通過Expressway配置多個CMS WebBridge

## 目錄

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[背景資訊](#)

[設定](#)

[網路圖表](#)

[組態](#)

[驗證](#)

[疑難排解](#)

## 簡介

本檔案介紹設定、驗證和疑難排解適用於WebRTC的Expressway上的Cisco Meeting Server(CMS)多個WebBridge(WB)的步驟。

## 必要條件

### 需求

思科建議您瞭解以下主題：

- Expressway X8.11及更高版本
- CMS伺服器2.3及更高版本
- 網路位址轉譯(NAT)
- 在NAT周圍使用中繼的遍歷(TURN)
- 適用於NAT的作業階段遍歷公用程式(STUN)
- 網域名稱系統(DNS)

配置先決條件：

- 若要參閱有關通過Expressway的單個WB代理的指南，請[按一下此處](#)
- 所有CMS節點的資料庫集群，[按一下此處](#)獲取配置指南
- 在CMS上配置並啟用了WEB、可擴展消息傳送和線上狀態協定(XMPP)和CallBridge(CB)，請單[擊此處](#)獲取配置指南
- 對CB節點進行群集，請[按一下此處](#)獲取配置指南

### 採用元件

- Expressway X8.11
- CMS 2.3.4 ( 3節點 )

本文中的資訊是根據特定實驗室環境內的裝置所建立。如果您的安裝處於活動狀態，請確保您瞭解

任何命令或配置更改的潛在影響。

## 背景資訊

從X8.11版本開始向Expressway新增了對通過Expressway使用多個WB的WebRTC代理的支援，從而實現了跨WB的冗餘和負載平衡。

在X8.11之前的版本中，僅支援負載均衡，當Expressway選擇的WEB關閉時，連線會失敗。

Expressway-C使用**Guest account client URI**查詢DNS來發現WB IP地址，然後從X8.11使用循環在這些WB之間平均分配WebRTC連線。

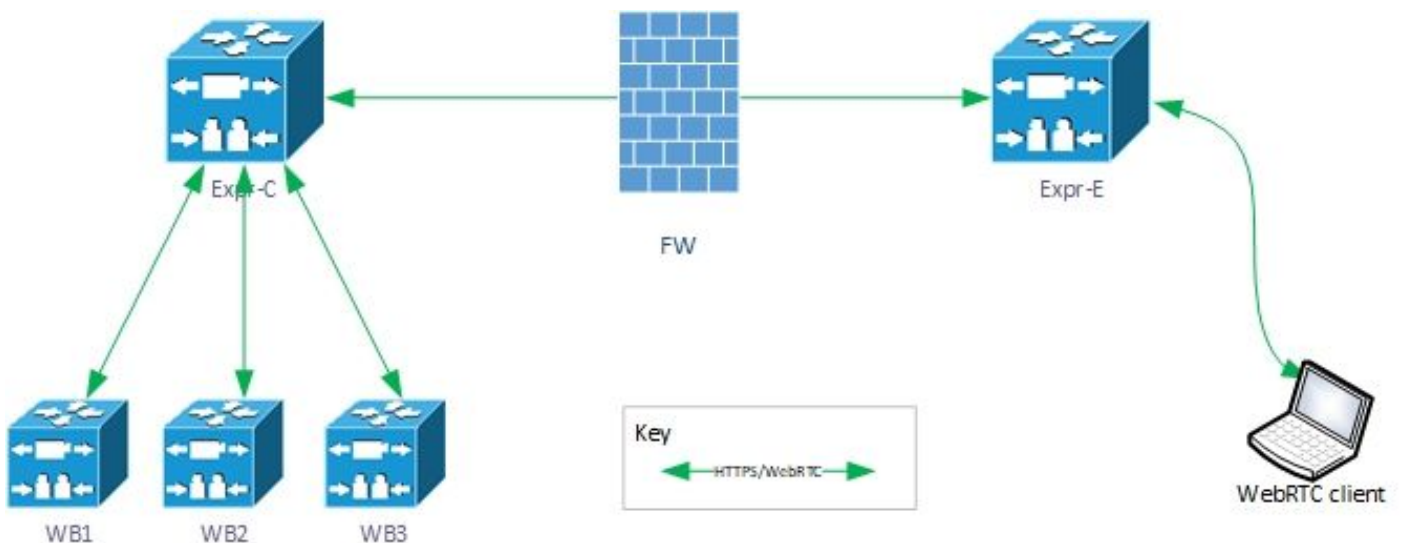
Expressway-C現在使用下列過程維護它知道屬於WB的IP地址的動態清單：

- 它使用(**Guest account client URI**)查詢DNS (大約每60分鐘)，以檢測對部署的任何有意更改；例如，將主機地址新增到服務(SRV)記錄或從其中移去
- 然後，它會探測DNS返回的主機地址，以檢查這些地址是否可以訪問，以及它們是WB (使用API呼叫)
- 如果某個地址無法訪問或主機不是WB，則Expressway-C會停止向該地址傳送WebRTC連線，並且此類地址在Expressway-C的CMS頁面上標籤為**Failed**狀態

**附註：**本文檔重點介紹在Expressway上的多個WB整合，而不是配置先決條件上的第一個專案符號點指南中介紹的WebRTC代理的完整配置。

## 設定

### 網路圖表



### 組態

1. 為訪客帳戶客戶端URI解析到的每個WB節點配置以下DNS SRV記錄：

在此示例中，應用以下內容：

來賓帳戶客戶端URI:joinext.vngtp.cms

WB1 FQDN:cmsvngtp.vngtp.cms

WB2 FQDN:cms2.vngtp.cms

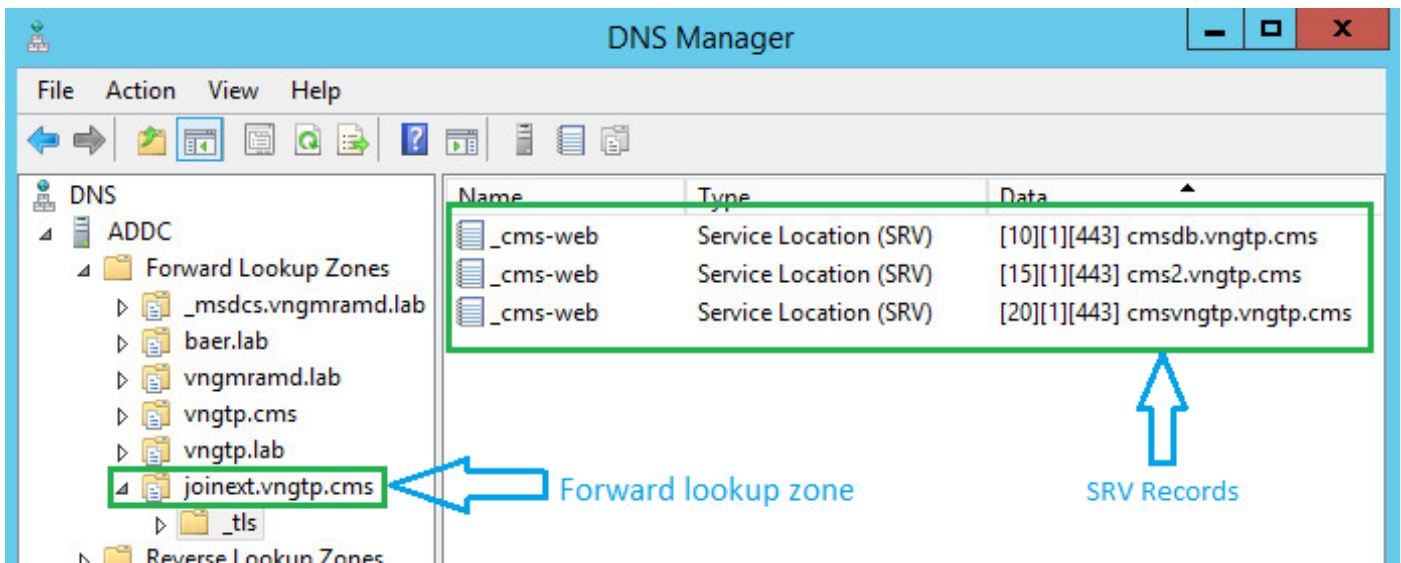
WB3 FQDN:cmsdb.vngtp.cms

**附註：**以下假設cmsdb.vngtp.cms的容量大於其他callbridge的容量，因此優先順序較低，以允許從Expressway-C到那裡進行更多連線。

為每個主機完全限定域名(FQDN)配置了以下DNS SRV記錄：

SRV記錄	連接埠	優先順序	機制	重量	解析為
_cms-web._tls.joinext.vngtp.cms	443	20		1	cmsvngtp.vngtp.cms
_cms-web._tls.joinext.vngtp.cms	443	15		1	cms2.vngtp.cms
_cms-web._tls.joinext.vngtp.cms	443	10		1	cmsdb.vngtp.cms

DNS伺服器示例：



**附註：**要通過Expressway實現更好的WebRTC連線的負載均衡（假設所有伺服器都具有相同的容量），請確保上述所有SRV記錄的優先順序和權重相同，請參閱以下示例：

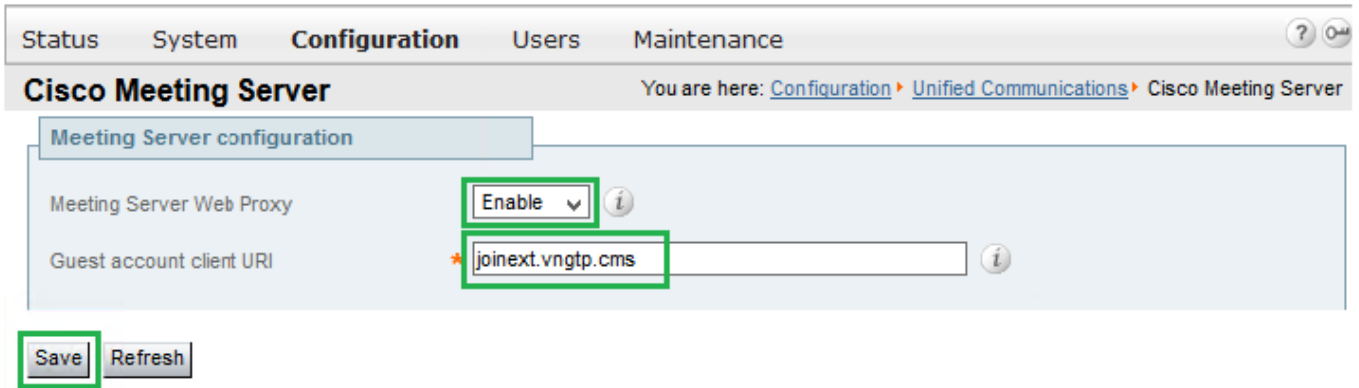
SRV記錄	連接埠	優先順序	機制	重量	解析為
_cms-web._tls.joinext.vngtp.c ms	443	0		0	cmsvngtp.vngt p.cms
_cms-web._tls.joinext.vngtp.c ms	443	0		0	cms2.vngtp.cm s
_cms-web._tls.joinext.vngtp.c ms	443	0		0	cmsdb.vngtp.c ms

ms

2.使用外部FQDN將WB整合到Expressway-C上（由外部方使用）：

- 導航至Configuration > Unified Communications > Cisco Meeting Server
- 在訪客帳戶客戶端URI中輸入FQDN
- 然後選擇Save

以下圖示範例：



## 驗證

使用本節內容，確認您的組態是否正常運作。

檢查以確保Expressway-C能夠連線到FQDN解析的所有WB。

導覽至Configuration > Unified Communications > Cisco Meeting Server。

Expressway-C能夠訪問WB後，狀態將為Active，如下圖所示：

Guest account client URI resolved to the following targets				
Name	Address	Priority	Weight	Status
joinext.vngtp.cms	192.168.1.66	20	1	Active
joinext.vngtp.cms	192.168.1.211	15	1	Active
joinext.vngtp.cms	192.168.1.212	10	1	Active

將WB新增到Expressway-C時會發生什麼情況的一些日誌審查：

a.Expressway-C在其資料庫中為Webbridge FQDN建立用於命令執行的對象UUID:

```
2018-07-09T14:09:10.773+02:00 vcsc httpd[8724]: web: Event="System Configuration Changed"
Detail="commands/cmsadd/uuid - created with value: 'd86cf754-dc5c-438f-900f-51e5c702b94e'" Src-
ip="192.168.1.5" Src-port="51223" User="admin" Level="1" UTCTime="2018-07-09 12:09:10"
2018-07-09T14:09:10.773+02:00 vcsc httpd[8724]: web: Event="System Configuration Changed"
Detail="commands/cmsadd/time_started - created with value: '0'" Src-ip="192.168.1.5" Src-
port="51223" User="admin" Level="1" UTCTime="2018-07-09 12:09:10"
2018-07-09T14:09:10.773+02:00 vcsc httpd[8724]: web: Event="System Configuration Changed"
Detail="commands/cmsadd/time_finished - created with value: '0'" Src-ip="192.168.1.5" Src-
port="51223" User="admin" Level="1" UTCTime="2018-07-09 12:09:10"
```

2018-07-09T14:09:10.773+02:00 vcsc httpd[8724]: web: Event="System Configuration Changed" Detail="commands/**cmsadd**/command\_state - created with value: 'queued'" Src-ip="192.168.1.5" Src-port="51223" User="admin" Level="1" UTCTime="2018-07-09 12:09:10"  
2018-07-09T14:09:10.773+02:00 vcsc httpd[8724]: web: Event="System Configuration Changed" Detail="commands/**cmsadd**/command\_error - created with value: ''" Src-ip="192.168.1.5" Src-port="51223" User="admin" Level="1" UTCTime="2018-07-09 12:09:10"  
2018-07-09T14:09:10.773+02:00 vcsc httpd[8724]: web: Event="System Configuration Changed" Detail="commands/**cmsadd**/name - created with value: '**joinext.vngtp.cms**'" Src-ip="192.168.1.5" Src-port="51223" User="admin" Level="1" UTCTime="2018-07-09 12:09:10"

### b.查詢SRV記錄`_cms-web._tls.<WB_FQDN>`的DNS，在此示例中`_cms web._tls.joinext.vngtp.cms`:

2052018-07-09 12:09:11.029192.168.1.64192.168.1.61DNS91Standard query 0xfb10 SRV **\_cms-web.\_tls.joinext.vngtp.cms**  
2062018-07-09 12:09:11.032192.168.1.61192.168.1.64DNS246Standard query response 0xfb10 SRV `_cms-web._tls.joinext.vngtp.cms` SRV 15 1 443 `cms2.vngtp.cms` SRV 20 1 443 `cmsvngtp.vngtp.cms` SRV 10 1 443 `cmsdb.vngtp.cms` A 192.168.1.211 A 192.168.1.66 A 192.168.1.212

### c.在其資料庫中為每個WB建立單個條目，這些條目與用於整合它們的外部聯接URI相關：

2018-07-09T14:09:11.187+02:00 vcsc UTCTime="2018-07-09 12:09:11,187" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid cb7d5de8-1ab3-4a0d-a52a-8dbc885effeb name: joinext.vngtp.cms name: joinext.vngtp.cms"  
2018-07-09T14:09:11.187+02:00 vcsc UTCTime="2018-07-09 12:09:11,187" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid cb7d5de8-1ab3-4a0d-a52a-8dbc885effeb name: joinext.vngtp.cms guid: **81db7b67-2aa9-4f64-8d74-04c4037397a8**"  
2018-07-09T14:09:11.187+02:00 vcsc UTCTime="2018-07-09 12:09:11,187" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid cb7d5de8-1ab3-4a0d-a52a-8dbc885effeb name: joinext.vngtp.cms dnsname: **cms2.vngtp.cms**"  
2018-07-09T14:09:11.187+02:00 vcsc UTCTime="2018-07-09 12:09:11,187" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid cb7d5de8-1ab3-4a0d-a52a-8dbc885effeb name: joinext.vngtp.cms address: **192.168.1.211**"  
2018-07-09T14:09:11.187+02:00 vcsc UTCTime="2018-07-09 12:09:11,187" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid cb7d5de8-1ab3-4a0d-a52a-8dbc885effeb name: joinext.vngtp.cms priority: 15"  
2018-07-09T14:09:11.187+02:00 vcsc UTCTime="2018-07-09 12:09:11,187" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid cb7d5de8-1ab3-4a0d-a52a-8dbc885effeb name: joinext.vngtp.cms weight: 1"  
2018-07-09T14:09:11.187+02:00 vcsc UTCTime="2018-07-09 12:09:11,187" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid cb7d5de8-1ab3-4a0d-a52a-8dbc885effeb name: joinext.vngtp.cms port: 443"  
  
2018-07-09T14:09:11.193+02:00 vcsc UTCTime="2018-07-09 12:09:11,193" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 0408bdd0-9ada-45a0-834d-ccda166e8006 name: joinext.vngtp.cms name: joinext.vngtp.cms"  
2018-07-09T14:09:11.193+02:00 vcsc UTCTime="2018-07-09 12:09:11,193" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 0408bdd0-9ada-45a0-834d-ccda166e8006 name: joinext.vngtp.cms guid: **97d8fa86-7de4-4410-9767-7bc8b1eeaced**"  
2018-07-09T14:09:11.193+02:00 vcsc UTCTime="2018-07-09 12:09:11,193" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 0408bdd0-9ada-45a0-834d-ccda166e8006 name: joinext.vngtp.cms dnsname: **cmsvngtp.vngtp.cms**"  
2018-07-09T14:09:11.193+02:00 vcsc UTCTime="2018-07-09 12:09:11,193" Event="System Configuration

```

Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 0408bdd0-9ada-45a0-834d-ccda166e8006 name: joinext.vngtp.cms
address: 192.168.1.66"
2018-07-09T14:09:11.193+02:00 vcsc UTCTime="2018-07-09 12:09:11,193" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 0408bdd0-9ada-45a0-834d-ccda166e8006 name: joinext.vngtp.cms
priority: 20"
2018-07-09T14:09:11.193+02:00 vcsc UTCTime="2018-07-09 12:09:11,193" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 0408bdd0-9ada-45a0-834d-ccda166e8006 name: joinext.vngtp.cms weight:
1"
2018-07-09T14:09:11.193+02:00 vcsc UTCTime="2018-07-09 12:09:11,193" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 0408bdd0-9ada-45a0-834d-ccda166e8006 name: joinext.vngtp.cms port:
443"

2018-07-09T14:09:11.206+02:00 vcsc UTCTime="2018-07-09 12:09:11,206" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid b151839e-a0dd-4176-bbed-ad28e05e9283 name: joinext.vngtp.cms name:
joinext.vngtp.cms"
2018-07-09T14:09:11.206+02:00 vcsc UTCTime="2018-07-09 12:09:11,206" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid b151839e-a0dd-4176-bbed-ad28e05e9283 name: joinext.vngtp.cms guid:
9c788380-6601-4dba-96e0-739511728369"
2018-07-09T14:09:11.206+02:00 vcsc UTCTime="2018-07-09 12:09:11,206" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid b151839e-a0dd-4176-bbed-ad28e05e9283 name: joinext.vngtp.cms
dnsname: cmsdb.vngtp.cms"
2018-07-09T14:09:11.206+02:00 vcsc UTCTime="2018-07-09 12:09:11,206" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid b151839e-a0dd-4176-bbed-ad28e05e9283 name: joinext.vngtp.cms
address: 192.168.1.212"
2018-07-09T14:09:11.206+02:00 vcsc UTCTime="2018-07-09 12:09:11,206" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid b151839e-a0dd-4176-bbed-ad28e05e9283 name: joinext.vngtp.cms
priority: 10"
2018-07-09T14:09:11.206+02:00 vcsc UTCTime="2018-07-09 12:09:11,206" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid b151839e-a0dd-4176-bbed-ad28e05e9283 name: joinext.vngtp.cms weight:
1"
2018-07-09T14:09:11.206+02:00 vcsc UTCTime="2018-07-09 12:09:11,206" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid b151839e-a0dd-4176-bbed-ad28e05e9283 name: joinext.vngtp.cms port:
443"

```

d.Expressway-C會在HTTP允許清單中，為HTTPS和WebSocket流量建立常規訪問規則 WB常規路徑的自動入站規則：

Type	Protocol	Ports	Match type	Path	Methods
Meeting Server web bridges	https	443	Prefix	/	GET, POST, PUT, HEAD, DELETE
Meeting Server web bridges	wss	443	Prefix	/	GET, POST, PUT, HEAD, DELETE

## 疑難排解


本節提供的資訊可用於對組態進行疑難排解。

以下是在將WB整合到Expressway後出現的一些典型問題：


1.在Expressway-C的CMS頁面上未看到優先順序和權重，如下圖所示：

## Meeting Server configuration

Meeting Server Web Proxy

Enable 

Guest account client URI

\*   

## Guest account client URI resolved to the following targets

Name	Address	Priority	Weight	Status
joinext.vngtp.cms	192.168.1.66	-	-	Active
joinext.vngtp.cms	192.168.1.211	-	-	Active
joinext.vngtp.cms	192.168.1.212	-	-	Active

需要的日誌：

- 包含來自Expressway-C的tcpdump的診斷日誌 導航到**維護>診斷>診斷日誌記錄**確保選中**Take tcpdump while logging**，然後選擇**Start New Log**

要在日誌中查詢的內容：

a.在診斷日誌中：

- 使用文本編輯器(例如記事本++)開啟診斷日誌，然後使用「在當前文檔中查詢所有」(Find All in Current Document)選項搜尋連接URL
- 您將在日誌中看到Expressway-C不會使用實際FQDN建立單個WB UUID，而是使用常規連線URL建立，如以下日誌片段所示：

```

2018-07-13T14:44:21.688+02:00 vcsc UTCTime="2018-07-13 12:44:21,688" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 0ab708c9-4ce1-47b3-9bb6-2964baf39bb3 name: joinext.vngtp.cms guid: 97d8fa86-7de4-4410-9767-7bc8b1eeaced"
2018-07-13T14:44:21.688+02:00 vcsc UTCTime="2018-07-13 12:44:21,688" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 0ab708c9-4ce1-47b3-9bb6-2964baf39bb3 name: joinext.vngtp.cms dnsname: joinext.vngtp.cms"
2018-07-13T14:44:21.688+02:00 vcsc UTCTime="2018-07-13 12:44:21,688" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 0ab708c9-4ce1-47b3-9bb6-2964baf39bb3 name: joinext.vngtp.cms address: 192.168.1.66"
2018-07-13T14:44:21.688+02:00 vcsc UTCTime="2018-07-13 12:44:21,688" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 0ab708c9-4ce1-47b3-9bb6-2964baf39bb3 name: joinext.vngtp.cms priority: 65536"
2018-07-13T14:44:21.688+02:00 vcsc UTCTime="2018-07-13 12:44:21,688" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 0ab708c9-4ce1-47b3-9bb6-2964baf39bb3 name: joinext.vngtp.cms weight: 0"
2018-07-13T14:44:21.688+02:00 vcsc UTCTime="2018-07-13 12:44:21,688" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 0ab708c9-4ce1-47b3-9bb6-2964baf39bb3 name: joinext.vngtp.cms port: 443"
2018-07-13T14:44:21.702+02:00 vcsc UTCTime="2018-07-13 12:44:21,702" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration edgeCmsServerAddresses uuid 4b1b99fb-1b8f-400e-b066-d8906ffcd6fc name: joinext.vngtp.cms name: joinext.vngtp.cms" 2018-07-13T14:44:21.702+02:00 vcsc UTCTime="2018-07-13 12:44:21,702" Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>"

```

```

Detail="xconfiguration edgeCmsServerAddresses uuid 4b1b99fb-1b8f-400e-b066-d8906ffcd6fc name:
joinext.vngtp.cms guid: 81db7b67-2aa9-4f64-8d74-04c4037397a8"
2018-07-13T14:44:21.702+02:00 vcsc UTCTime="2018-07-13 12:44:21,702" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 4b1b99fb-1b8f-400e-b066-d8906ffcd6fc name: joinext.vngtp.cms
dnsname: joinext.vngtp.cms"
2018-07-13T14:44:21.702+02:00 vcsc UTCTime="2018-07-13 12:44:21,702" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 4b1b99fb-1b8f-400e-b066-d8906ffcd6fc name: joinext.vngtp.cms
address: 192.168.1.211"
2018-07-13T14:44:21.702+02:00 vcsc UTCTime="2018-07-13 12:44:21,702" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 4b1b99fb-1b8f-400e-b066-d8906ffcd6fc name: joinext.vngtp.cms
priority: 65536"
2018-07-13T14:44:21.702+02:00 vcsc UTCTime="2018-07-13 12:44:21,702" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 4b1b99fb-1b8f-400e-b066-d8906ffcd6fc name: joinext.vngtp.cms weight:
0"
2018-07-13T14:44:21.702+02:00 vcsc UTCTime="2018-07-13 12:44:21,702" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 4b1b99fb-1b8f-400e-b066-d8906ffcd6fc name: joinext.vngtp.cms port:
443"
2018-07-13T14:44:21.706+02:00 vcsc UTCTime="2018-07-13 12:44:21,706" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 6cc95c70-0636-4190-85f2-333b86b29c91 name: joinext.vngtp.cms name:
joinext.vngtp.cms" 2018-07-13T14:44:21.706+02:00 vcsc UTCTime="2018-07-13 12:44:21,706"
Event="System Configuration Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>"
Detail="xconfiguration edgeCmsServerAddresses uuid 6cc95c70-0636-4190-85f2-333b86b29c91 name:
joinext.vngtp.cms guid: 9c788380-6601-4dba-96e0-739511728369"
2018-07-13T14:44:21.706+02:00 vcsc UTCTime="2018-07-13 12:44:21,706" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 6cc95c70-0636-4190-85f2-333b86b29c91 name: joinext.vngtp.cms
dnsname: joinext.vngtp.cms"
2018-07-13T14:44:21.706+02:00 vcsc UTCTime="2018-07-13 12:44:21,706" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 6cc95c70-0636-4190-85f2-333b86b29c91 name: joinext.vngtp.cms
address: 192.168.1.212"
2018-07-13T14:44:21.706+02:00 vcsc UTCTime="2018-07-13 12:44:21,706" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 6cc95c70-0636-4190-85f2-333b86b29c91 name: joinext.vngtp.cms
priority: 65536"
2018-07-13T14:44:21.706+02:00 vcsc UTCTime="2018-07-13 12:44:21,706" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 6cc95c70-0636-4190-85f2-333b86b29c91 name: joinext.vngtp.cms weight:
0"
2018-07-13T14:44:21.706+02:00 vcsc UTCTime="2018-07-13 12:44:21,706" Event="System Configuration
Changed" Node="clusterdb@127.0.0.1" PID="<0.488.0>" Detail="xconfiguration
edgeCmsServerAddresses uuid 6cc95c70-0636-4190-85f2-333b86b29c91 name: joinext.vngtp.cms port:
443"

```

b.在封包擷取中：

- 使用字串DNS進行過濾器
- 在結果中，您將看到針對SRV記錄的DNS查詢失敗，如下圖所示：

The screenshot shows a network traffic capture in Wireshark. The filter is set to 'dns'. The packet list pane shows several DNS packets. Packet 167 is a standard query for SRV records for '\_cms-web.\_tls.joinext.vngtp.cms'. Packet 172 is the corresponding response, which is a 'No such name' error (RCODE=3). Packet 173 is another standard query for SRV records for '\_cms-web.\_tls.joinext.vngtp.cms'. Packet 174 is the response for that query.

No.	Time	Source	Destination	Protocol	Length	Info
15	2018-07-13 12:44:07.963	192.168.1.64	192.168.1.61	DNS	74	Standard query 0x00a6 AAAA vcse.vngtp.lab
16	2018-07-13 12:44:07.963	192.168.1.61	192.168.1.64	DNS	135	Standard query response 0x00a6 AAAA vcse.vngtp.lab SOA addc.vngmramd.lab
112	2018-07-13 12:44:11.619	192.168.1.64	192.168.1.61	DNS	85	Standard query 0x13ea PTR 200.36.48.10.in-addr.arpa
130	2018-07-13 12:44:12.927	192.168.1.61	192.168.1.64	DNS	85	Standard query response 0x13ea Server failure PTR 200.36.48.10.in-addr.arpa
162	2018-07-13 12:44:17.931	192.168.1.64	192.168.1.61	DNS	85	Standard query 0xc823 PTR 200.36.48.10.in-addr.arpa
167	2018-07-13 12:44:21.568	192.168.1.64	192.168.1.61	DNS	91	Standard query 0xd373 SRV _cms-web._tls.joinext.vngtp.cms
168	2018-07-13 12:44:21.568	192.168.1.61	192.168.1.64	DNS	172	Standard query response 0xd373 No such name SRV _cms-web._tls.joinext.vngtp.cms SOA addc.vngmramd.lab
169	2018-07-13 12:44:21.569	192.168.1.64	192.168.1.61	DNS	104	Standard query 0x9792 SRV _cms-web._tls.joinext.vngtp.cms.vngmramd.lab



解決方案：

檢查並確保在Expressway-C使用的DNS伺服器中有以下內容：

- 使用**Guest account client URI**（而不僅僅是URI中的域）的正向查詢區域(FLZ)
- 確保此FLZ中配置了SRV記錄(**\_cms-web.\_tls.<WB\_FQDN>**)，並且其中包含相關的優先順序和權重

2.使用外部聯接URL新增集群後，一個或多個WEB處於**Active**狀態，如下圖所示：

Guest account client URI resolved to the following targets				
Name	Address	Priority	Weight	Status
joinext.vngtp.cms	192.168.1.211	15	1	Active
joinext.vngtp.cms	192.168.1.212	20	1	Failed
joinext.vngtp.cms	192.168.1.66	10	1	Active

需要的日誌：

- 包含來自Expressway-C的tcpdump的診斷日誌
- 來自伺服器的資料包捕獲在命令列介面(CLI)上使用命令**pcap <interface>**時顯示**Failed**狀態，該介面是WB的偵聽介面

要在日誌中查詢的內容：

a.診斷日誌：

- 使用失敗的WB的IP地址在當前文檔中查詢全部
- 日誌中會顯示此錯誤：

```
Detail="CMS check failed" Address="192.168.1.212", Error="[Errno 111] Connection refused"
```

b.在封包擷取中：

- 使用字串**ip.addr==<IP address of the failed WB>**
- 您將看到從Expressway-C傳送到WB的TCP SYN消息，並且在這種情況下，未收到SYN-ACK或ACK，如下圖所示：

The screenshot shows a Wireshark capture of network traffic. The filter is set to 'ip.addr==192.168.1.212'. The capture shows several TCP packets. Packet 301 is a SYN packet from 192.168.1.64 to 192.168.1.212. Packet 302 is a RST, ACK packet from 192.168.1.212 to 192.168.1.64. Packet 1675 is another SYN packet from 192.168.1.64 to 192.168.1.212. Packet 1676 is another RST, ACK packet from 192.168.1.212 to 192.168.1.64.

No.	Time	Source	Destination	Protocol	Length	Info
301	2018-07-13 13:10:01.011	192.168.1.64	192.168.1.212	TCP	74	31630 → 443 [SYN] Seq=0 Win=29200 Len=0 MSS=1460 SACK_PERM=1 TSval=2866356001
302	2018-07-13 13:10:01.011	192.168.1.212	192.168.1.64	TCP	60	443 → 31630 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
1675	2018-07-13 13:15:01.048	192.168.1.64	192.168.1.212	TCP	74	31778 → 443 [SYN] Seq=0 Win=29200 Len=0 MSS=1460 SACK_PERM=1 TSval=2866656029
1676	2018-07-13 13:15:01.049	192.168.1.212	192.168.1.64	TCP	60	443 → 31778 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0

- WB pcap將顯示這些TCP SYN消息到達，但沒有傳送響應(SYN-ACK或ACK)。

解決方案：

使用CLI上的**webbridge enable** 指令，確保在CMS節點上啟用WB。