Connection Broker

Where Virtual Desktops Meet Real Business

DNS Setup Guide

Versions 5.3, 6.x
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Connection Broker DNS Service Location (SRV)

Service Location records enable Leostream Connect and the Leostream Agent to automatically discover the address of the Connection Broker by querying the DNS server for the following SRV record:

`_connection_broker._tcp.`*`yourdomain.com`*`.`

where *`yourdomain.com`* is your domain.

If you cannot create a DNS SRV record, for example, if you do not have write permissions to your corporate DNS server, Connection Broker 6.2 allows you to specify a Connection Broker VIP. See “Setting Network Configuration and Connection Broker VIP” in the Connection Broker Administrator’s Guide for information on using the Connection Broker VIP.

A correctly configured DNS server returns the IP address of one Connection Broker. If you have multiple Connection Brokers, create multiple `_connection_broker` SRV records.

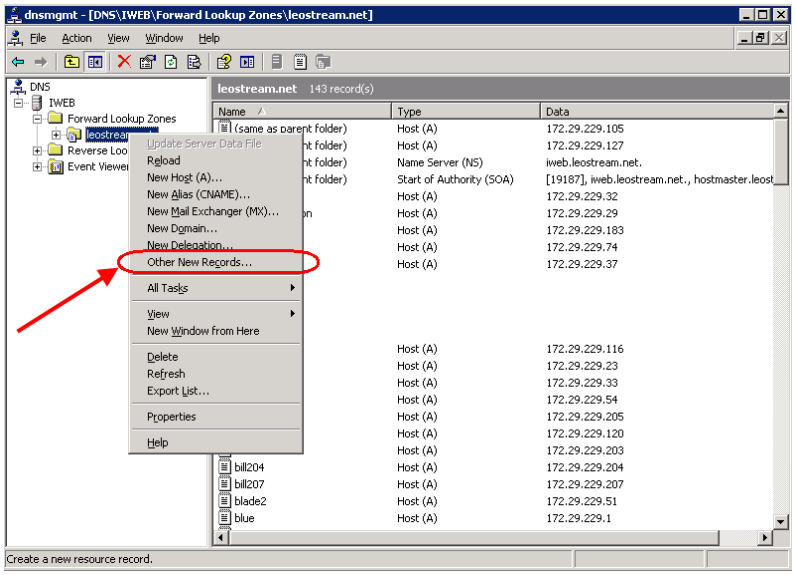
The DNS server returns the weight and priority of each SRV record.

- **Weight:** Allocates connection requests between Connection Brokers in the same cluster. The default value of 100 indicates that the load is evenly spread between all Connection Brokers. Setting the weight higher indicates that a particular Connection Broker handles a greater percentage of requests.
- **Priority:** Sets the order in which Connection Brokers are queried. A priority of zero means a Connection Broker (or a cluster of brokers that all have the same priority) would be selected first. A priority of 65535 is the lowest possible priority.

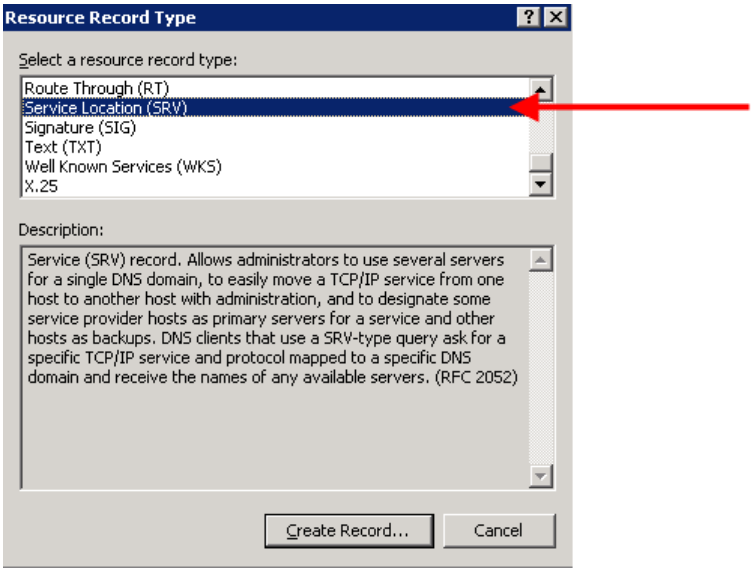
Use priority, in conjunction with dividing Connection Brokers up into geographic regions, to ensure that a user is normally connected to a cluster in their region, but, if this cluster is down, they are connected to the next closest region. To achieve this it is necessary to setup **Sites** within DNS. A site corresponds to a geographic region, in this case.

Manually register a Connection Broker with a Microsoft® DNS server, as follows:

1. Open the DNS console and click on the **Forward Lookup Zone.**
2. Right-click on your domain name in the list on the left-hand side of the window, and select **Other New Records** from the context menu, as shown in the following figure.



3. In the **Resource Record Type** dialog that appears**,** click on **Service Location**, as shown in the following figure.

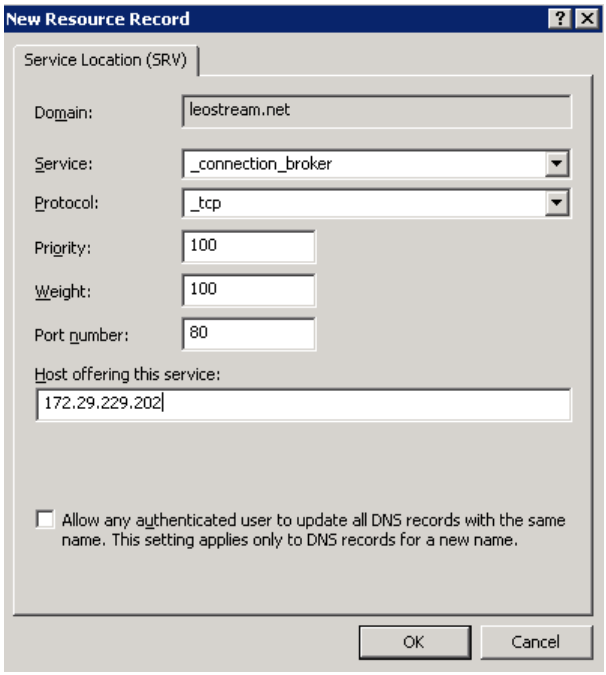


4. Click **Create Record**. The **New Resource Record** dialog opens.

5. In the **New Resource Record** dialog, enter the following settings:

   - **Service:** _connection_broker
   - **Protocol:** _tcp
   - **Priority:** 100 (This is a temporary value)
   - **Weight:** 100 (This is a temporary value)
   - **Port Number:** 80 (or 443)
   - **Host offering this service:** *connectionbroker.domainname.com*

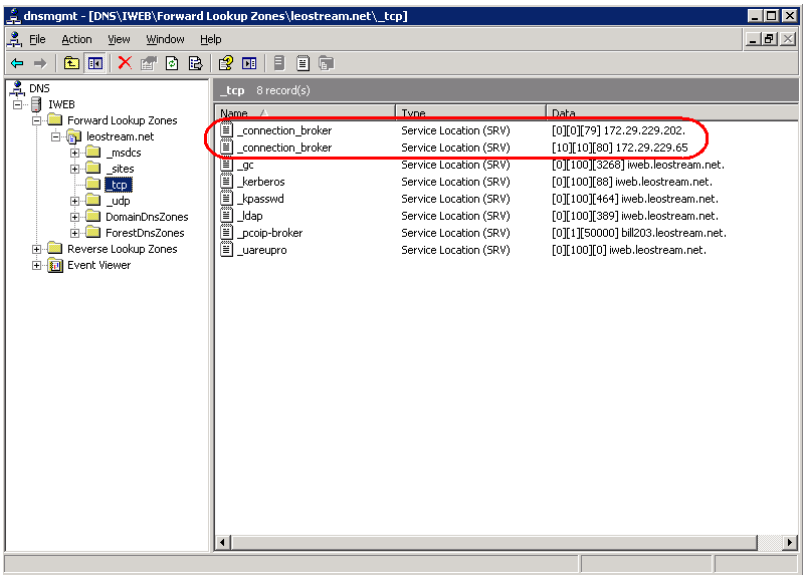
   Where *connectionbroker.domainname.com* is your Connection Broker address. Your **New Resource Record** dialog looks something like the following:



6. Click **OK** to save the settings and return to the main DNS console window.

7. To configure additional Connection Broker SRV records, in the **Resource Record Type** dialog, click **Create Record** and repeat steps 5 and 6. Otherwise, in the **Resource Record Type** dialog, click **Done**.

To view your Connection Broker Service Location records, expand the domain name node in the DNS console and select the `_tcp` node, as shown in the following figure.



You can check for the DNS SRV records using `nslookup`. At the `nslookup` prompt, enter the following two commands:

```
set querytype=SRV

_connection_broker._tcp.domain.name
```

Where *`domain.name`* is your domain name.

If the record exists, `nslookup` returns the priority, weight, port, and SRV hostname. Otherwise, it returns a message indicating the record is not found.

Using DNS for Load Balancing

To use DNS for software-based load balancing, create multiple DNS records for your Connection Broker. If you are using SRV records, point your SRV record to a named record, for example:

```
_connection_broker = cb.yourCompany.com
```

Point the named record `cb.yourCompany.com` to a set of Connection Broker addresses.

When a user signs in, DNS uses a simple round robin scheme to determine which Connection Broker to send the user to.

 A simple DNS system cannot detect failure of a single Connection Broker host, and continues to hand that Connection Broker address to users. A user assigned to a failed Connection Broker address must wait until the connection times out before another Connection Broker address is tried. Therefore, using DNS for load balancing is suitable only for systems that can stand a moderate amount of delay during failover.

To satisfy your availability requirements, look for a vendor-enhanced DNS system or switch to a hardware-based load balancer.