






[HOME](#) [BLOG](#) [SCRIPTS](#) [TOOLS](#) [ABOUT ME](#) [PRIVACY](#)

Deploying Citrix NetScaler in Microsoft Azure and Configuring with XenDesktop 7.7

ACCESS GATEWAY, BLOG, CITRIX, CLOUD, FEATURED, MICROSOFT AZURE, NETSCALER, STOREFRONT, XENAPP, XENDESKTOP

DEPLOYING CITRIX NETSCALER IN MICROSOFT AZURE AND CONFIGURING WITH XENDESKTOP 7.7

[@DBRETTY ON TWITTER](#)

 BRETTY  06/01/2016  3 COMMENTS



This post has already been read 7363 times!

With the release of Citrix XenDesktop 7.7 we have now been given the ability to use Microsoft Azure as a hosting platform, this in itself is a massive leap forward for the product and the method for deploying workloads to Azure has already been well documented by @msandbu here:

<https://msandbu.wordpress.com/2016/01/02/setting-up-xendesktop-7-7-against-microsoft-azure/>

The purpose of this article is to describe the process for deploying and configuring a Citrix NetScaler VPX into the Microsoft Azure cloud to provide secure access to your Citrix XenDesktop 7.7 Site hosted in Microsoft Azure



The Scenario

I have a full XenDesktop 7.7 site set up in Azure (a simple site granted, but fully working) and NO Site to Site VPN set-up between the cloud and my on-premises network.

bmuk-dc

- Domain Controller
- Citrix Licensing

bmuk-xd

- XenDesktop 7.7 Controller and Database host
- StoreFront (Store and Receiver for Web configured to point to the XenDesktop 7.7 controller in Azure)
- Director

bmuk-2012

- XenDesktop 7.7 Server worker with the VDA and Office 2016 installed and published to Citrix Studio.

I have also set up a Cloud Service for the 3 machines bmuk.cloudapp.net as well as a network with a single subnet defined bmuk-net. You must have these set up before you attempt to deploy your NetScaler.

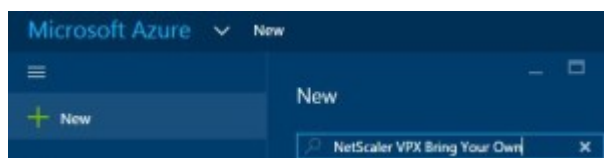
NAME	RESOURCE GROUP	LOCATION
bmuk	bmuk	North Europe
bmuk-2012	bmuk	North Europe
bmuk-xd	bmuk	North Europe
bmuk-net	Default: Networking	North Europe
bmuk-netscaler	Group	North Europe
bmuk-storage	Default: Storage-NorthEurope	North Europe
bmuk-ud	bmuk	North Europe

So lets get on with building our Citrix NetScaler.

Part 1 – Deploying the Citrix NetScaler VPX Appliance into Microsoft Azure

First you will need to log into your Microsoft Azure Portal at <https://portal.azure.com/>

Click on New and search the marketplace for “Citrix NetScaler VPX Bring Your Own”



Wait for the search results to come back and select the NetScaler from the list on the right.

Dave Brett Retweeted



Rory Monaghan
@Rorymon

A brand new episode of [@5BytesPodcast](#) is now available featuring some news on a MacBook Pro Recall, a FREE Application Delivery Decision Matrix, a Windows 10 v1809 Cumulative Update and much more youtu.be/NXyyx5mg7Bo via [@YouTube](#)

[YouTube](#) @YouTube



Jun 23, 2019



Dave Brett
@dbretty

3 different skate parks in 3 hours with the boy. Not sure who enjoyed it more, him or I 😂

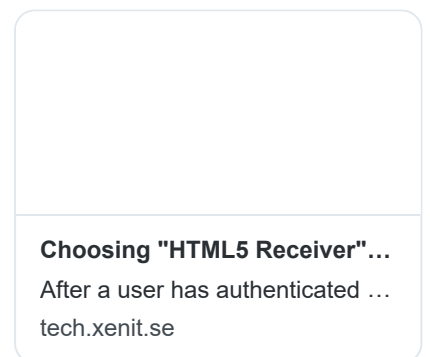
Jun 23, 2019

Dave Brett Retweeted



Scott Osborne
@VirtualOzzy

#citrix ADC and Receiver decisions made for ya if you need. tech.xenit.se/choosing-html5...



Jun 23, 2019

MOST READ POSTS



Change the deployment model to "Classic" and click create

Select a deployment model ⓘ

Classic ▼

Create

Add a host name, root username, select "password" for the authentication type and enter a root password.

* Host Name

bmuk-ns ✓

* User name

nsroot ✓

Authentication type

Password SSH public key

* Password

***** ✓

For the pricing tier you can leave it at Standard A2 unless you are doing a larger deployment where you may want to up scale the size of the NetScaler.

Click on "Optional Configuration" to set-up the networking and storage.

Optional Configuration >

Network, storage, diagnostics

Leave Availability Set as Not Configured and click on "Network"

* Network >

Review default settings

For the Virtual Network click and select your existing vNet you have configured in Azure and make sure that the portal has selected your subnet assigned to the vNet.

Click on "Domain Name" and add a new domain name for the NetScaler. Please note that this cloudapp domain name will be separate from the

Putting it all together - Citrix XenDesktop, ADFS, Azure MFA, NetScaler Unified Gateway and Citrix FAS - Part 1

Putting it all together – Citrix XenDesktop, ADFS, Azure MFA, NetScaler Unified Gateway and Citrix FAS – Part 3

Citrix XenDesktop Monitoring - Free Community Project

Building a NetScaler Gateway from Scratch (SSL Labs A Grade)

Citrix ShareFile Storage Zones, NetScaler Unified Gateway and ADFS

SUBSCRIBE

Enter your email address to subscribe to bretty.me.uk blog posts

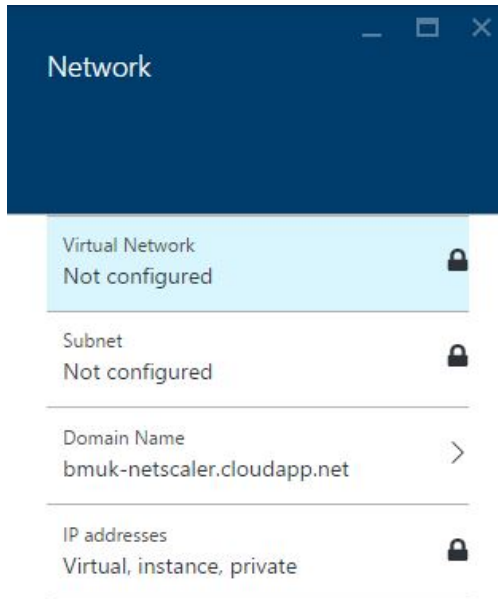
Join 53 other subscribers

Email Address

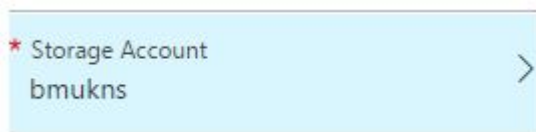
Subscribe

rest of your machines in Azure. This is so that we can split the endpoint rules out for the NetScaler and keep them away from the existing machines.

With all that configured click on OK.



Click on "Storage Account" to configure where the appliance will be created.



Select the storage account that you want the appliance to be placed and click OK.

Click on Endpoints to add the relevant endpoints to the appliance.



There should be an endpoint created for port 22 already.

Add the following ports to the list:

- 80
- 443
- 3008 / 3010 (Optional if you are going to use Java for management – yes – its not completely gone yet!!)

NAME	PRIVATE PORT	PROTOCOL	PUBLIC PORT
SSH	22	tcp	...
HTTP	80	TCP	80
HTTPS	443	TCP	443
		TCP	...

Click on OK to save the endpoints, and OK again to save the optional configuration.

Finally you need to accept the legal terms and deploy. Click on Legal terms at the bottom, click purchase and then click Create.

You will now see the NetScaler being deployed to you cloud.



OPTIONAL

If you are deploying for a production system you are not going to want to give out the cloudapp dns name for the NetScaler for access to your remote apps, so at this point whilst the NetScaler is being created I would hop onto your dns admin for your domain and create a CNAME record for your chosen domain and point it to your cloudapp dns name.

In this case I have created netscaler.bretty.me.uk as the cname record.

A screenshot of a DNS record configuration interface. It shows a table with columns for Name, TTL, Type, Value, and Actions. The record shown is: netscaler.bretty.me.uk, 200, IN, CNAME, bmsck-ns.cloudapp.net, with Edit and Delete buttons.

Part 2 – Configuring the Citrix NetScaler Appliance – Basic Settings

Once the NetScaler has been deployed you will need to log in and configure the VPX and the NetScaler Gateway to allow user access.

Navigate to your cname record your created earlier (or your cloudapp name for the NetScaler and you should see the NetScaler Login page.

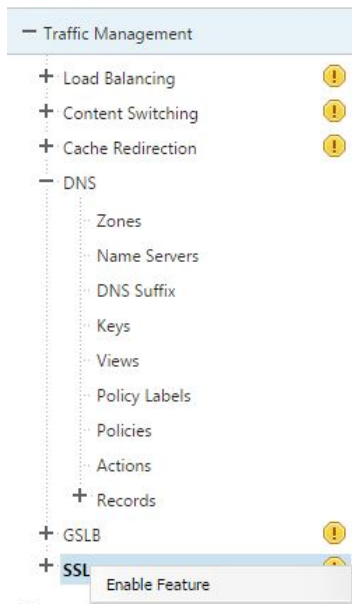


Log in with the credentials you specified during the deployment.

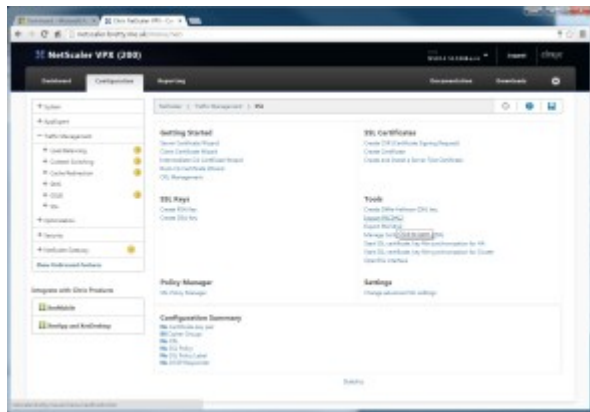
The first step is to configure and license the NetScaler basic options. Click on "Subnet IP Address"



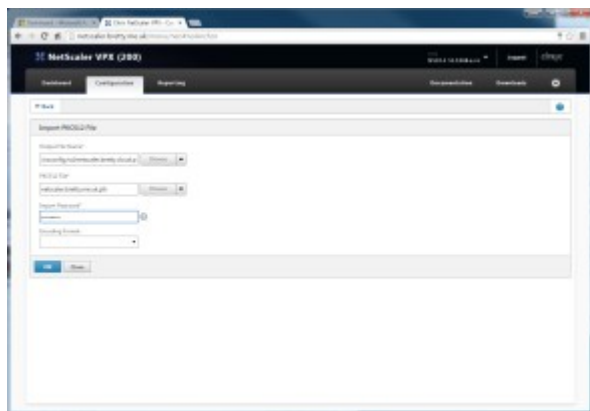
Enable SSL



Click on Import PKCS#12



Specify an output PEM file and the location for the input file as well as the import password for the certificate.

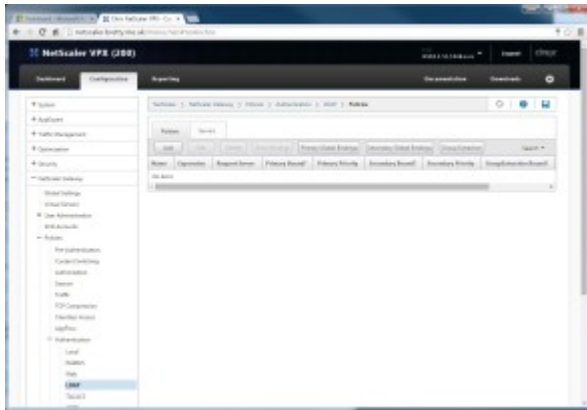


Expand "SSL - Certificates" and click install.

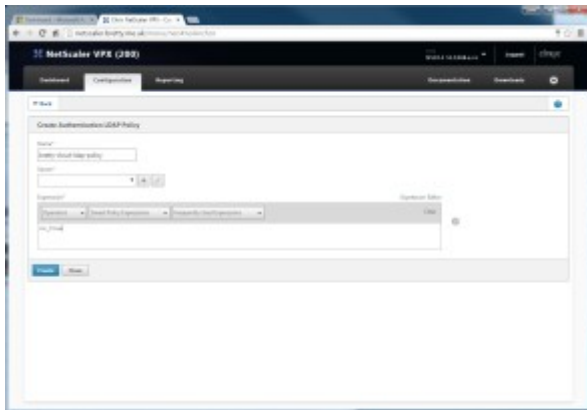


We now need to set up the authentication method to authenticate our users against the LDAP directory in Azure.

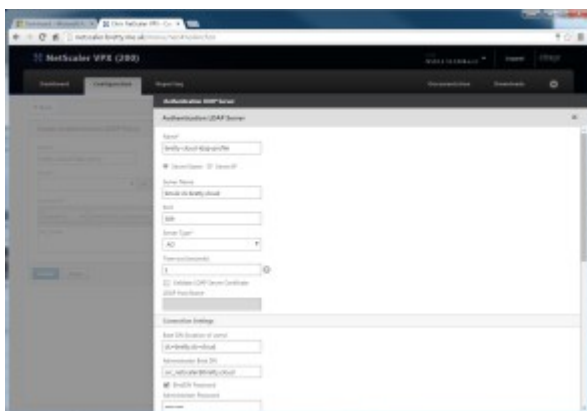
Navigate to LDAP Policies and click Add.



Give the Policy a name, type ns_true in the expression box and click the + next to Server to add a new LDAP server.

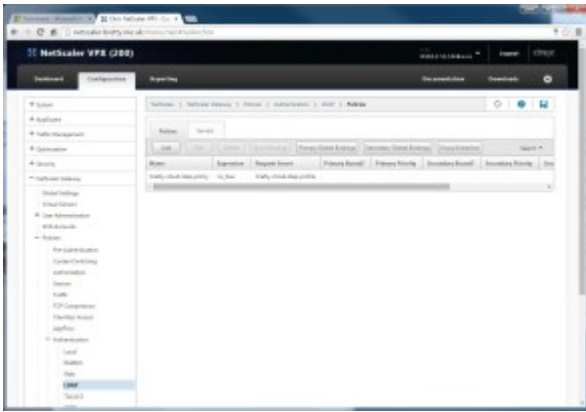


Give the LDAP server profile a name, enter your domain controller in Azure, port 389 (yes I know its insecure – that's coming in the next blog post!), put the base DN for the users and a account to bind to the active directory with in the format username@domain.com (don't forget to put in the password!)



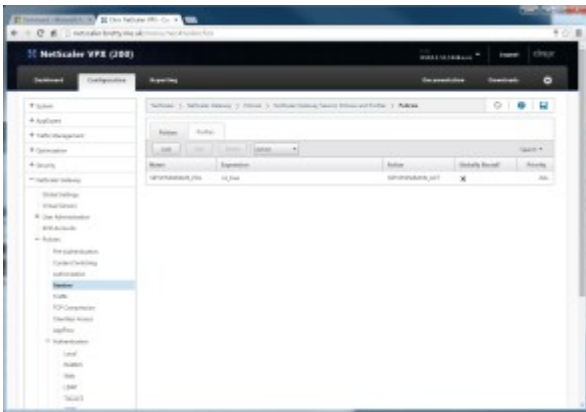
Click create twice to add the ldap policy





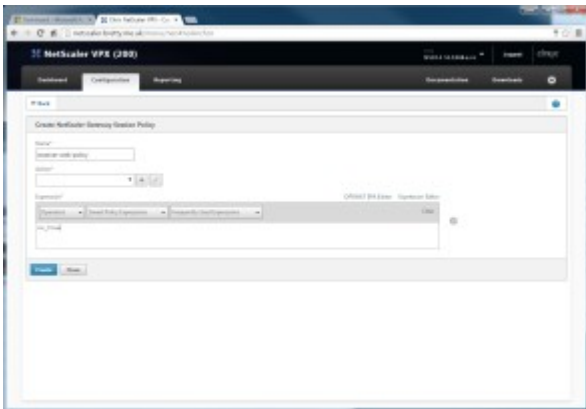
Next is to create the session policy for Receiver.

Open the Session Policy tab and click Add.



give the policy a name and type "ns_true" in the expression field and click the + sign next to the Action.

NOTE: I know that ns_true is NOT the best expression to use here however the focus of this is to configure the NetScaler Gateway for XenDesktop 7.7 integration and not to cover off all the endpoints access the NetScaler Gateway. I will cover setting up multiple session policies and priority in another blog post. For the purpose of this article ns_true will allow you to use receiver for web to access the NetScaler Gateway.

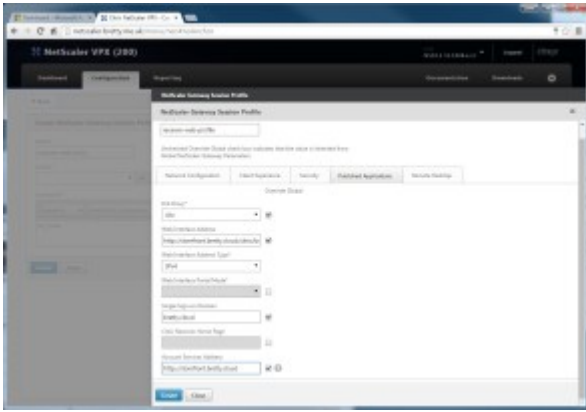


Give the profile a name and click the "Published Applications" tab.

Turn ICA Proxy "ON", Add the Web Interface Address to point to your StoreFront Receiver for Web Site, add your single sign on domain for your

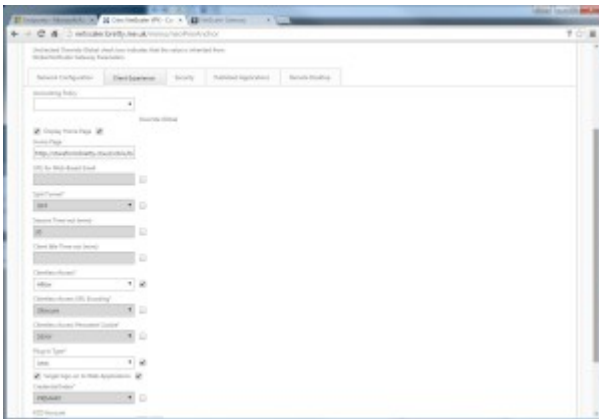


Azure LDAP directory and set the account services address to your FQDN for StoreFront.

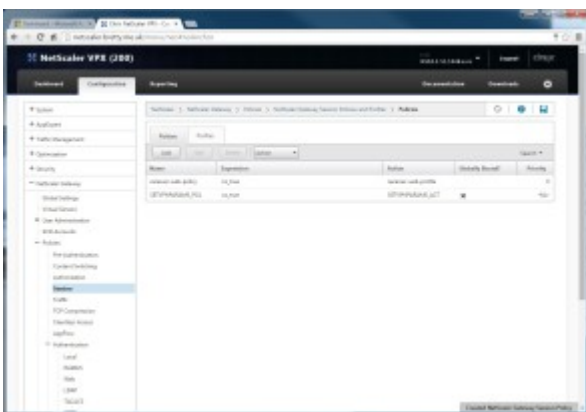


Switch back to the Security tab and select Default Authorization Action and set it to "Allow"

On the Client Experience tab enable Display Home Page and point it to your StoreFront Web Site, Allow Client-less Access, Change the plugin Type to Java and Enable Single Sign on to Web Applications.



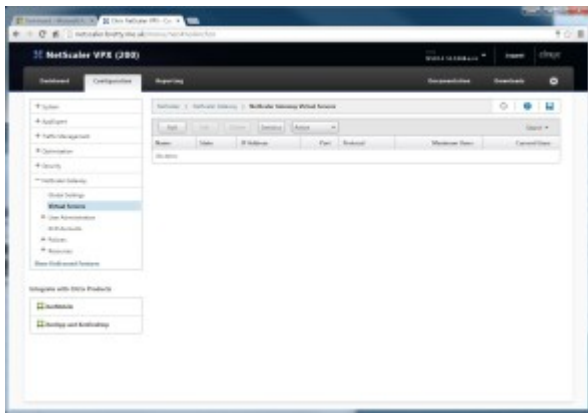
Click create twice and your session profile should be created for you.



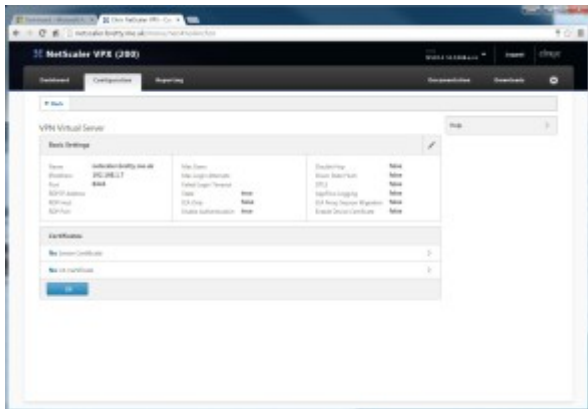
Finally you need to create the NetScaler Gateway and assign the policies to it.

Open Virtual Servers and click "Add"

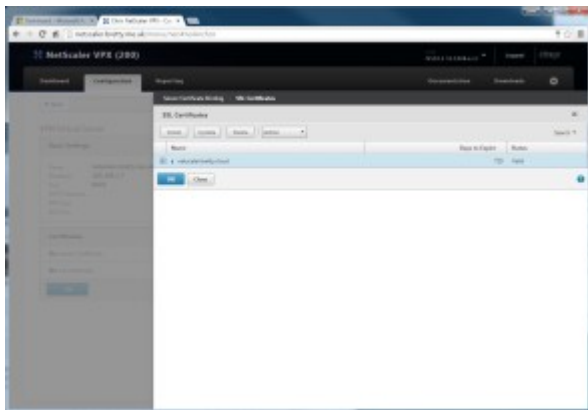




Give the gateway a name, IP Address (This needs to be the same as your NetScaler VPX Device) and change the port to something other than 443, I will use 8443.

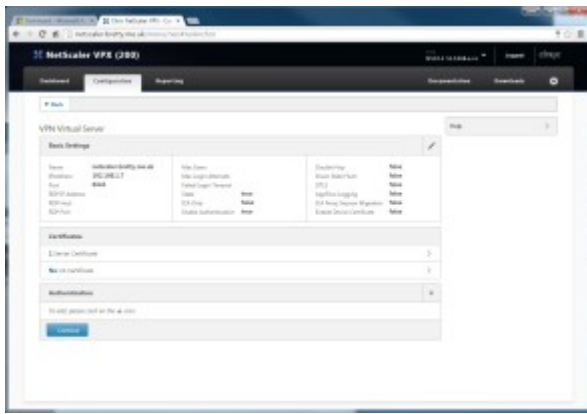


Click on "No Server Certificate" and then select your certificate you uploaded earlier.

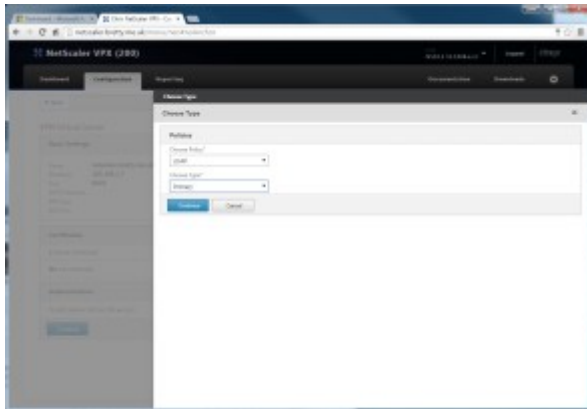


Next click the + sign to assign an authentication policy to the NetScaler Gateway

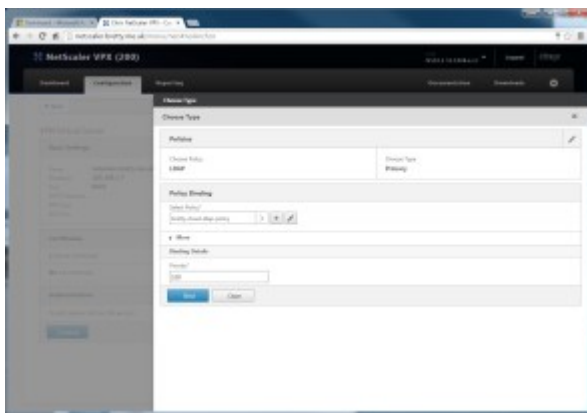




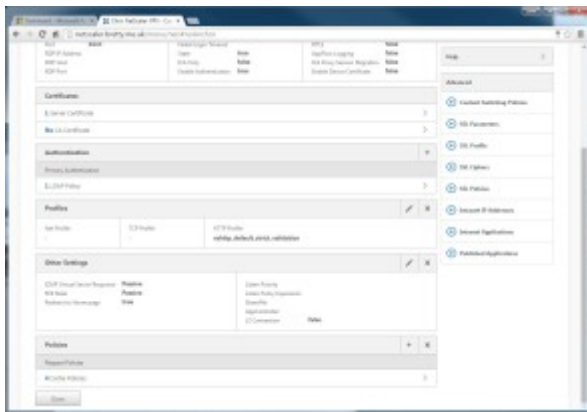
Change the policy to LDAP and Primary and click continue.



Bind the LDAP policy you created earlier and select Bind

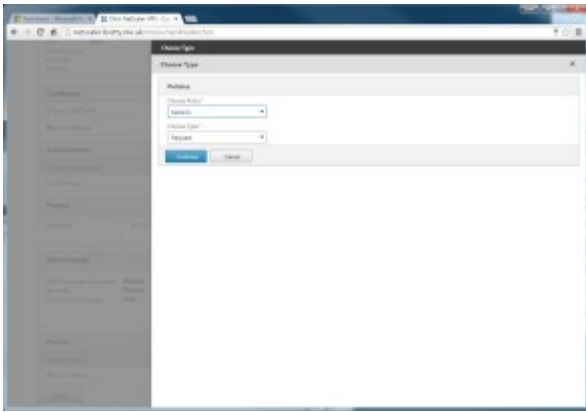


Finally select the + sign next to policies to assign your session policy.

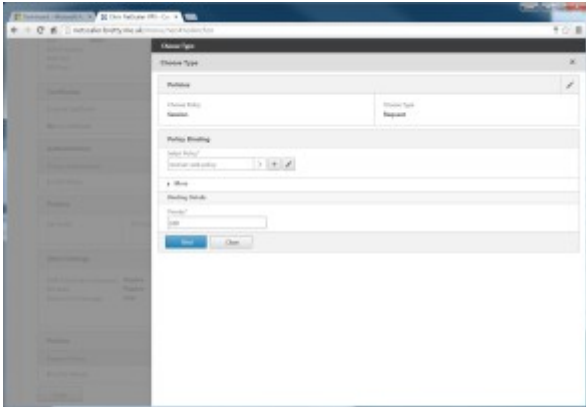


Change the Policy to Session and Request for the type and click continue

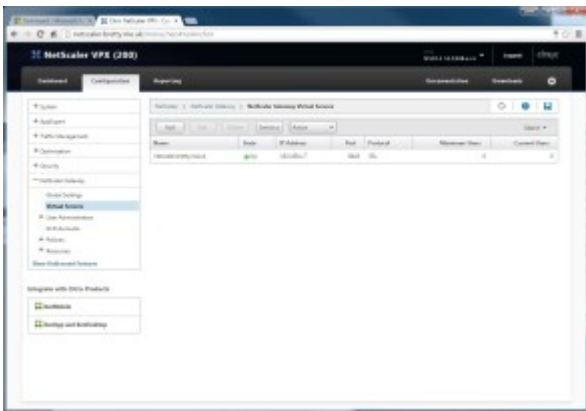




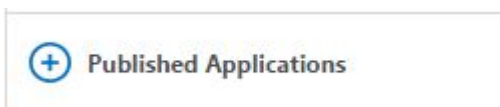
Select the policy you created earlier and click on Bind.



Click Done and you should have your NetScaler Gateway showing as UP.

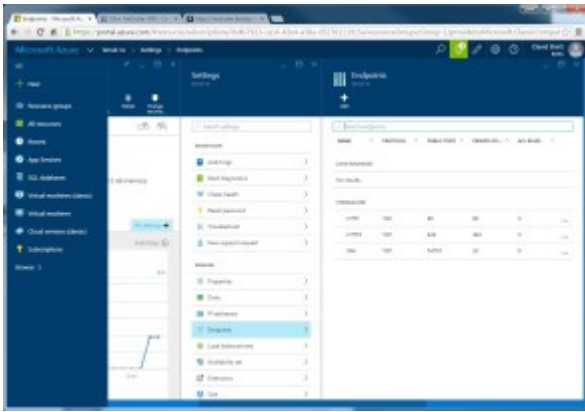


Double click the NetScaler Gateway to open it up and click the + sign on the right next to published applications.

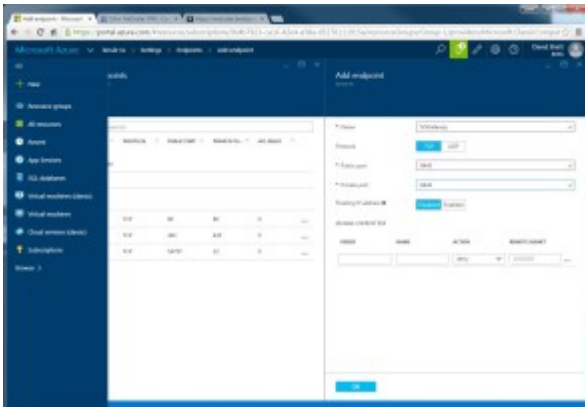


Now click where it says "No STA Server"





Give the Endpoint a name and enter 8443 as the public and private port.



Click Create and wait for the new Endpoint to be created. Once done switch back to your NetScaler Gateway page and hit refresh. You should now see that you are prompted with a NetScaler Gateway login screen.



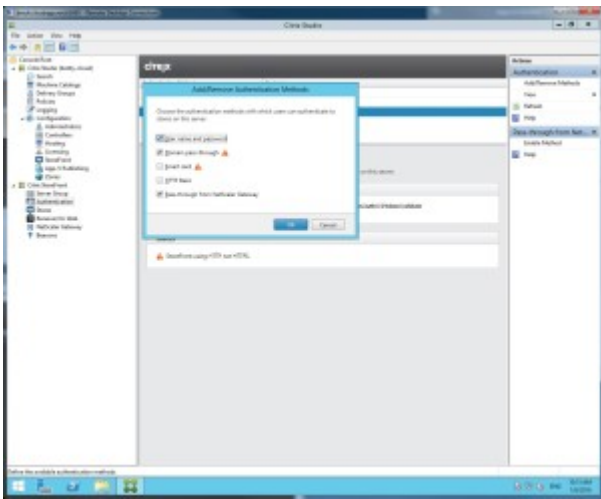
Part 4 – Integrating the NetScaler Gateway with XenDesktop 7.7 and StoreFront

All that remains to do is add the NetScaler Gateway to your XenDesktop 7.7 deployment in Azure. First log into the controller in Azure and open up Citrix Studio. You will see here that I have a site configured in the Azure Cloud and StoreFront set up with a single Store for the Internal Network only.

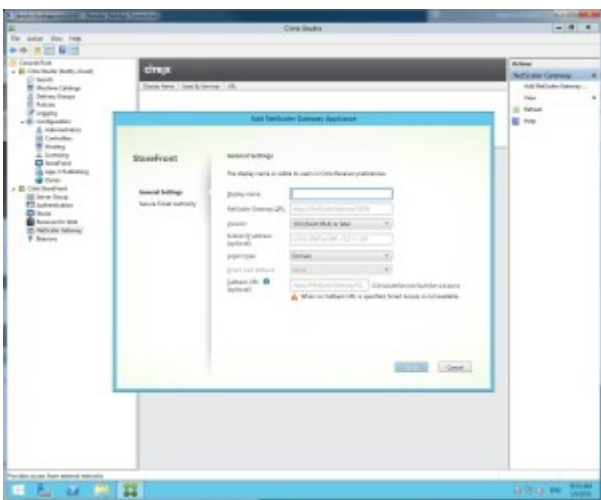
First you need to add the NetScaler Gateway as an available authentication method to StoreFront.

Open Authentication and select "Add Method from the right. Enable Pass-through from NetScaler Gateway.

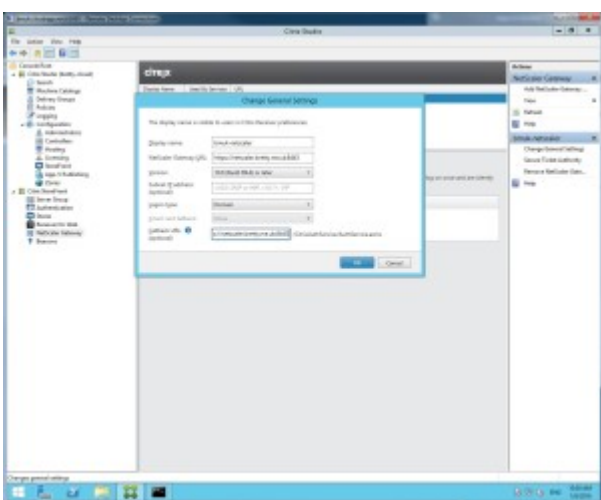




Next you need to add the NetScaler Gateway to StoreFront. Select NetScaler Gateway and click Add NetScaler Gateway.

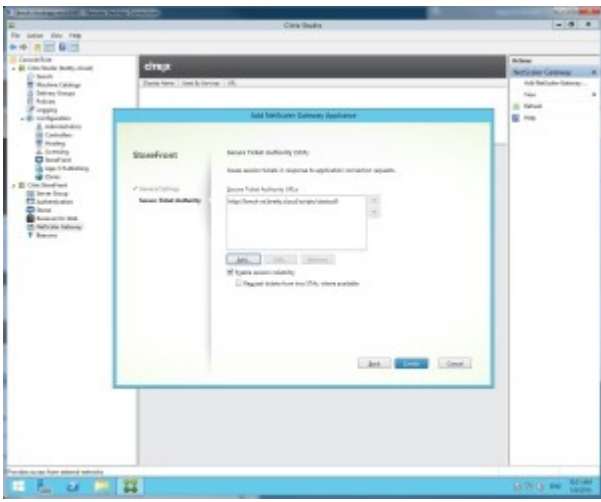


Give the NetScaler a name, enter the External NetScaler Gateway URL and INCLUDE the port. Select Domain and enter the NetScaler Gateway URL and Port for the callback URL.

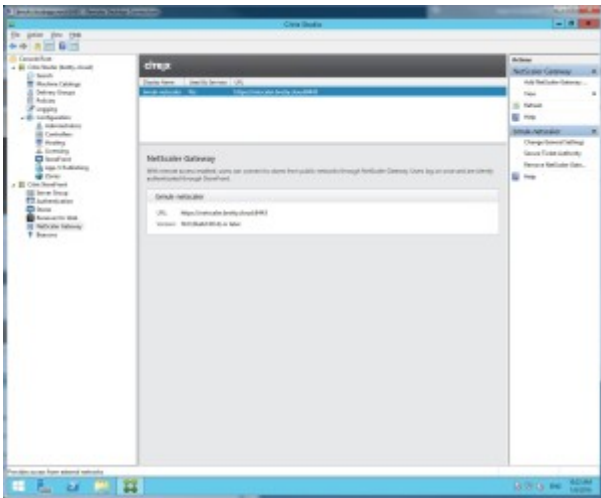


Click next to add a Secure Ticket Authority to the gateway. Click add and enter the path to one or more of your XenDesktop 7.7 controllers hosted in Azure.



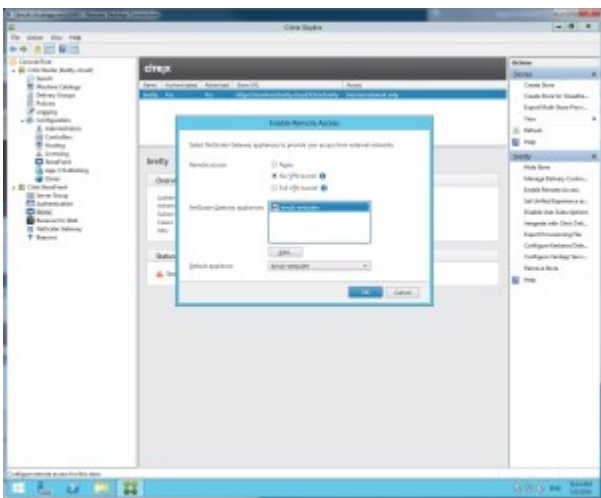


Click create to add the NetScaler Gateway to StoreFront.



All that's left to do is to tell the XenDesktop 7.7 StoreFront that you want to allow remote access.

Click on Stores, select your store and click Enable Remote Access. Select No VPN Tunnel and select your NetScaler Gateway from the list. Click ok.



That's it! You should be good to test your new NetScaler Gateway and XenDesktop 7.7 install in Azure.

Open up a web page and navigate to your NetScaler Gateway URL.

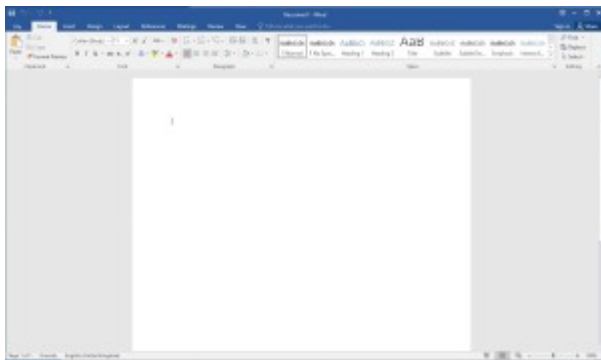




Log in as a domain user in your Azure Domain



Run up one of your applications.



Finished, that was the guide on how to integrate Citrix NetScaler, Microsoft Azure and Citrix XenDesktop 7.7

Hope you find this useful, as always please comment and share.

Later,

b@m


◆ AZURE, CITRIX, CLOUD, GUIDE, MICROSOFT, NETSCALER GATEWAY, XENAPP, XENDESKTOP, XENDESKTOP 7.7

← Automated Citrix StoreFront Build on Server 2016 TP4



Deploying a Multi-Zone Global XenDesktop 7.7 Site on the Microsoft Azure Public Cloud →


3 THOUGHTS ON “DEPLOYING CITRIX NETSCALER IN MICROSOFT AZURE AND CONFIGURING WITH XENDESKTOP 7.7”

1.  Ben the Builder
17/09/2016 at 4:38 am

I'm hoping you can help a fellow techie out.. I'm setting up a POC of XenApp 7.6 in AzureRM and was using your site as a guide. I'm hitting a wall trying to authenticate to the Netscaler.


Regards,
Ben the Builder

Reply ↓

- A.  Bretty Post author
17/09/2016 at 1:31 pm

What's the issue that you are having authenticating?
Assume you can see the bind on the NetScaler back to LDAP as good. Or are you struggling getting onto the NetScaler GUI?

Reply ↓

2.  Rabie SHILI
24/11/2016 at 10:23 pm

Hi,
Thank you very much for your article ! it is very helpful !
I just started Learning Azure and Netsclaer 😊
My question is about designing the lab: should the netscaler and other servers (DC, XD, SF) be on the same network or they can be in different networks ? and why ?
Thank you so much

Best regards

Reply ↓

Leave a Reply

Your email address will not be published. Required fields are marked *



Comment

Name *

Email *

Website

Save my name, email, and website in this browser for the next time I comment.

Notify me of follow-up comments by email.

Notify me of new posts by email.

POST COMMENT

This site uses Akismet to reduce spam. [Learn how your comment data is processed.](#)



+44 (0)7712 894998



dave@bretty.me.uk



Liphook, Hampshire, United Kingdom

TAGS

NUMBER OF VISITORS

LATEST COMMENTS



297,893 People

[Access Gateway](#) [adfs](#) [admin](#)
[AGEE](#) [app-v](#) [automation](#)
[azure](#) [CCIA](#) **Citrix** [cloud](#)
[community](#) [fas](#) [free](#) [google](#)
[guide](#) [Hint](#) [how-to](#) [IIS](#)
[install guide](#) [Internet](#) [IoT](#) [mfa](#)
[microsoft](#) [monitoring](#)
NetScaler [netscaler](#)
[gateway](#) [octoblu](#) [powershell](#)
[scripting](#) [server 2008](#) [silverton](#)
[silvertonhcl](#) [storefront](#) [summit](#)
[Tricks](#) [turbo](#) [unified gateway](#)
[vmware](#) [Web](#) [Web Interface](#)
[windows](#) [Windows 2008](#)
XenApp
XenDesktop [xenmobile](#)

[Supra ITS on Load Balancing and Presenting Microsoft RDS 2016 TP5 using Citrix NetScaler Unified Gateway](#)

[maverick on Nutanix Calm – Creating Your First Citrix Blueprint](#)

[PraseedP on Setting Up NetScaler GSLB To Load Balance Access Gateway](#)

[Hampe on Citrix XenMobile 10 \(MDM and MAM\) Behind a Single IP Address Using Citrix NetScaler](#)

[Bretty on VMware vRealize / vCAC Unable to Authenticate User – Please Try Again](#)

