



Testing and Integration Group

Deploying Alteon NG with Citrix XenDesktop

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Introduction

This document contains best practice information about the setup, configuration, and customization of Alteon NG Application Delivery Controller (ADC) with Citrix XenDesktop.

Citrix XenDesktop lets you create virtualized desktops quickly and easily and then make them available to users on demand through any device.

Alteon NG ADC provides mission critical availability, enhanced security, simple scalability, and high operational resiliency.

Alteon NG ADC provides hardware acceleration SSL offloading to enhance performance by reducing the SSL load on Citrix servers. Additionally, Alteon NG boosts performance by enabling Content-Intelligent Connection Management, which multiplexes client and server connections, and improves service throughput by reducing Citrix server loads.

In a Citrix XenDesktop environment, Alteon NG provides high availability and smart traffic management, and also keeps persistence records for certain connections to always be directed to the same server for a specified period of time, ensuring that the work flow in the XenDesktop environment is fully preserved.

Citrix XenDesktop

Citrix XenDesktop delivers virtual Windows apps and desktops as secure mobile services. With XenDesktop, IT can mobilize a business while reducing costs by centralizing control and security of intellectual property. XenDesktop can deliver full desktops or just the apps to any device. XenDesktop enables the delivery of a native touch-enabled mobile experience that is optimized for the type of device, as well as the network. XenDesktop is built on a 3rd-generation FlexCast Management Architecture (FMA), and is the only hybrid cloud-ready platform that separates the management plane from the workload to enable IT to securely deliver published apps on-premises, and manage workers and mobile workspaces either on-premises or in the cloud.

Alteon Next Generation ADC

Alteon NG is Radware's next generation application delivery controller (ADC) and the only load balancer that guarantees application SLA. It provides advanced, end-to-end local and global load balancing capabilities for all Web, cloud, and mobile based applications. The Alteon NG load balancer combines best-of-breed application delivery plus advanced services to companies with key application infrastructure challenges affecting Web applications such as heavier, more complex Web content; mobility, and BYOD, and the migration to the cloud.

Alteon NG: Complete Application SLA Assurance

The Alteon next generation (NG) ADC solution is the industry's only ADC built from the ground up to ensure application SLA at all times. It innovatively leverages several next-generation services that are not available in any other ADC on the market:

- Alteon NG is architecturally designed to ensure application SLA by delivering full resource isolation between different applications, while eliminating resources from being maxed-out.
- Alteon NG incorporates application performance monitoring (APM) capabilities that provide full visibility into application SLA that can be broken down by application, transaction, or location.
- Alteon NG integrates FastView, the industry's most advanced Web performance optimization (WPO) technology, which accelerates application response for higher conversion rates, revenues, and productivity.
- Alteon NG is part of unique attack mitigation architecture, allowing accurate detection and mitigation of the most advanced cyber-attacks.

Architecturally Designed to Ensure Application SLA

Alteon NG enables companies to flexibly allocate a separate virtual ADC (vADC) instance per application, service, or department. Each vADC instance is fully isolated from neighboring instances and has independent CPU cores, memory, network stack, management control, and operating system versions. As a result, the Alteon ADC ensures complete fault isolation and predictable application SLA for all delivered Web applications at all times. In addition, next-generation services can be quickly and safely enabled without impacting the performance of other service applications.

Alteon NG is designed to dynamically scale when necessary. It can scale up on-demand, meaning you can add more throughput, services, and vADCs with no hardware modifications. It can also scale out-of-the-box on demand by leveraging an external, extensible resource pool (such as server infrastructure) for computational intensive NG services. As a result, Alteon NG allows for cost-effective consolidation, eliminating the purchase of additional ADC units. It provides easy, fast provisioning of additional vADC instances with no service interruption at a fraction of the cost of buying a physical ADC.

Full Application SLA Visibility with Radware's Application Performance Monitoring (APM)

Radware's Application Performance Monitoring (APM) module provides real-time tracking of application SLA by measuring real-user transactions, including real errors. Embedded in Alteon NG, Radware's APM is an out-of-the box solution that does not require synthetic



transaction scripting or additional installation, thereby reducing deployment time and costs. Radware's APM intuitively tracks SLA by location, user, and application and transaction type, to expedite root cause analysis. In addition, it provides historical reports based on user-defined SLA that feature granular analysis allowing the measurement of the delay per transaction phase, including data center time, network latency, and browser rendering time.

FastView™ Web Performance Optimization (WPO)

Radware's FastView™ technology, part of Alteon NG, is the most advanced application acceleration technology in the industry. By adding Web performance optimization (WPO) capabilities on top of the standard application acceleration features, it accelerates application response time up to 40%. FastView acceleration treatments are optimized according to each user, end-user device, and browser, with specific optimization for mobile devices. As a result, FastView increases conversion rates and revenues and also improves productivity and customer loyalty.

In addition, FastView™ automatically optimizes new applications, new application versions, and new application modules, reducing manual code optimization while letting you focus on core business competence.

Unique Attack Mitigation Architecture

A key component of Radware's Attack Mitigation Network (AMN), Alteon NG delivers the best Web application security coverage. It leverages a unique Defense Messaging mechanism that efficiently mitigates attacks by signaling attack information to Radware's DefensePipe cloud service and DefensePro, a data center attack mitigator located at the network perimeter.

The integration of advanced Web Application Firewall (WAF) capabilities, such as a unique out-of-path WAF deployment mode and auto-policy generation features, enable risk free implementation. In addition, full instance isolation and resource reservation ensures ADC resources. Even when WAF policies are updated, there is no impact on application availability and performance. This results in a secured Web application with guaranteed SLA. Finally, Alteon NG features a built-in authentication gateway that provides single sign-on (SSO) capabilities by supporting RADIUS, Active Directory, LDAP, and RSA SecurID, and simplifies the user experience without compromising application security.

Complete Layer 4-7 Feature Set

Alteon NG delivers a complete set of Layer 4-7 services to ensure the availability, performance, and security of mission-critical applications in the local and cloud data centers. These extend to traffic redirection, content modification, persistency, redundancy, advanced health monitoring, and global server load balancing (GSLB). In addition, Alteon NG integrates advanced modules



such as bandwidth management and link load balancing, reducing data center footprint and simplifying deployment.

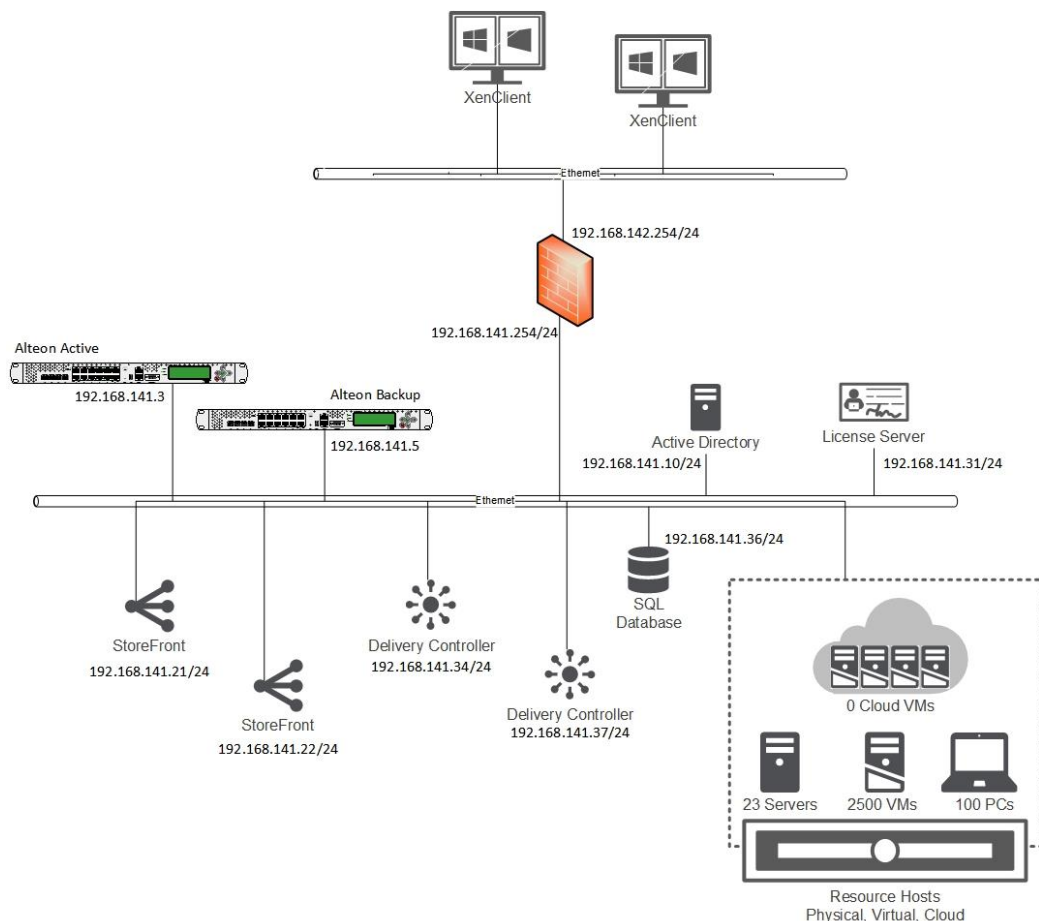
Software and Hardware

The following is a list of the hardware and software tested to verify the interoperability of the presented solution:

- Alteon version 30.2/Alteon VA 30.2
- Citrix XenDesktop v.7.6 FP2
- Windows Server 2008 r2

Configuration Overview

The following example illustrates a configuration of the Alteon NG load balancer to manage and monitor the Citrix XenDesktop environment using StoreFront and DDC (Desktop Delivery Controller) servers. In this implementation, client traffic goes to the StoreFront, and in the back-end from the StoreFront to DDC servers. All traffic is managed by the Alteon NG load balancer to ensure client persistency all the way to the StoreFront and DDC servers. The Alteon NG terminates the SSL sessions in order to offload the CPU processing of the StoreFront servers.



Important Notes

- HTTP compression should be activated on the Alteon platform
- The persistency mechanism on the Citrix StoreFront servers is performed by the Alteon Insert Cookie mechanism (which is Radware’s recommendation for Citrix load balancing)
- The URL for the StoreFront server for this example is **storefront.ctradware.com**, pointing to 192.168.141.200 (StoreFront VIP).
- The URL for the DDC server for this example is **deliver.ctradware.com**, pointing to 192.168.141.205 (StoreFront VIP).
- In this scenario, client NAT is enabled on the Alteon platform. Citrix XenDesktop requires having the Client IP address to be fully functional. To do this, you use X-Forwarded-For (the HTTP header field is a de facto standard for identifying the originating IP address of a client connecting to a Web server through an HTTP proxy or load balancer).
- Citrix XenDesktop requires session timeout for 20 minutes. Ensure that the aging time on the Alteon platform is set to 20 minutes.

- To sync the configuration, after configuring the active Alteon platform, run the command `/oper/slb/sync` to copy the configuration.
Note: You must configure the Layer 2 and Layer 3 network configuration on the Alteon standby device before applying the sync command.
- Throughout this document, reference is made to the **Radware** pre-configured certificate, but you can import a certificate or create a new certificate in Alteon. For more information on exporting, importing, or creating a certificate, see the *Alteon Application Switch Operating System Application Guide*.

Installation and Configuration

This section describes how to install and configure the solution.

Alteon NG Active

Network Configuration

```
/c/sys/mgmt
  dhcp disabled
  addr 192.168.142.3
  mask 255.255.255.0
  broad 192.168.142.255
  gw 192.168.142.254
  ena
/c/sys/access
  tnet ena
/c/port 1
  pvid 5
/c/l2/vlan 1
  learn ena
  def 0
/c/l2/vlan 5
  ena
  name "VLAN 5"
  learn ena
  def 1
/c/l2/stg 1/clear
/c/l2/stg 1/add 1 2 5
```




```
/c/sys/access/sshd/ena
/c/sys/access/sshd/sshv1 dis
/c/sys/access/sshd/on
/c/l3/if 1
  ena
  ipver v4
  addr 192.168.141.3
  vlan 5
/c/l3/gw 1
  ena
  ipver v4
  addr 192.168.141.254
```

VRRP Configuration

```
/c/l3/vrrp/vr 11
  ena
  ipver v4
  vrid 11
  if 1
  prio 250
  addr 192.168.141.4
/c/l3/vrrp/vr 12
  ena
  ipver v4
  vrid 12
  if 1
  prio 250
  addr 192.168.141.200
/c/l3/vrrp/vr 13
  ena
  ipver v4
  vrid 13
  if 1
  prio 250
  addr 192.168.141.205
```



Compression Configuration

```
/c/slb/accel/compress
  on
/c/slb/accel/compress/comppol 1
  minsize 1
  ena
```

SSL Configuration

```
/c/slb/ssl/certs/key 1
/c/slb/ssl/certs/import key "1" text
-----BEGIN RSA PRIVATE KEY-----
Proc-Type: 4, ENCRYPTED
DEK-Info: DES-EDE3-CBC,1D470BDDA99ECEf1
```

```
YVGgPQA6k0SS2K9DDA4MFpT9k7an7FKX1VSW5uVY+2Lvke1FzcdG8UKiVH5Dj/o
xO/Ak9kzdX/Zh1M0CnuPi5VzPiaJrbpS0XFy+hZ0+o/23MuAjn8a7m3Sa4BcaAP+
gQw5xOs+PLZYBsDKHh7tlp7ND8S+JOVZH9wV+5CTkJuIxoC/It9/XPhNYGI0bdZM
lAmeE5xVl3YyEr5KF8ONFyQvL6WyIr3lCpzMbAe2E60me9WSoFfgyayDWUVBa0LM
IYQm8srttUWtX+8CUQPtS3abGZMv5wcZxlaAQNyZRMRe1clAOM3rC8GgKB11x59w
1KTjsAm6yVz7lszp7fDxscD8KxkRIZdaTaR0SzngovPEect2DyivG07CpKOWaQVV
IcQ0/gEsM34r0sWeZr8sIMjWflgVyFzUh/3VlQHLs65mh04Lmx6UWhVURmsIMXPr
BqDLHJYXAmoWm0wjcgM5XTK5Ja+HeR4wEmZqBEXYpbOTEytoPVEgq0vN8NVjGF
QQp62b85/UIfWwKI+zluqI34unF5Ueb3fjk0VUqu90QF7NV2xznrAK5Znxx1wYND
q3qIWvcUUIpiVEi7czrnKF8GFT7pWtKruqXclEGpp/sv49lSnyP3kPXtbgBcsQGd
ERAlGvxeEqI2VrMCsGwYtTOXzdd+AI sXb48vIKNXV0V47fvPPp3MLQXzpU5mKZBM
PVPLkL340Q/qb8KlsOS6IC+j32dRGrxY6SIamYQNu6c9eX/9n+dMT2ynAZgxsAdP
R15QRbsB11jd6svAxwVvhjuORrmDGfNhRMsgjNbSxdFTW16XosGagG4Eu6SPJX2/
S+SmoXIfZbdwyc908JDU4iJM+7vOBiWtYt8YuD/U/VkHiCrbGCyLnYO+auRPpyMb
hswMZJ5j4hkvcRi87BLVM2x6Ax5i1vFwKaeJRLQrCI3cB1sVF7GX2xRoyM5ZX2Ae
JAMjV6IZvs6e6hSgXlnxWiqv3M3jNnjQ2sy4lwSsrWo71Zd5jRjB2y9jrd/016d6
u+SIRNDuV7Hv41YZAEXCplvcc4VAe0DwIhOqy6T6gF8T8131Uft54sAi/sQPdDm9
J9PzWN4xURGLX9rlxr8eGWKe1RjOGR/spZ7Q5zxsNiE5Xj83HVI3VJykLM04NC+X
rchx5f6i9OyaaW0Wa4NkPEhTou8uGhiXmQtommsADo80JadDVkcJca6nx4yRjdi4
uVoepod2cJfzb18/zeP0LAF+4cTIGag8iaTfOccBNvPhsHuXp9RuYdfvgMMUobRj
XXAETnIDs96lQUUj2Mr6rog3qxNctnHbQe6/6uZdhvYzH4dbbviWhRQ4YobhVef
```



```
iwkUGOihjUqLu2XMPfxAb5/yxgEtfoPRAfNxi/c0jOAZG7rYi+nqIjmGzINl0e6y
K35FbERLrzqMGmqMVPD4FF1PDbfH2dAes7SOPYR4P5Yc6v4WfvRDeSdD2GpbBZdc
RjlKlHl6uwoHR+6ORXo2fynLvOuZ2xCLmx7cC2PJjiXHH+fWGG+Ylj2qqguu9DWe
MonsrGteBRvrG3Nfw593PHJFGU1iflMwlb+e6eLbwgKnN7E9g9wj3A==
-----END RSA PRIVATE KEY-----
```

```
/c/slb/ssl/certs/request 1
/c/slb/ssl/certs/import request "1" text
-----BEGIN CERTIFICATE REQUEST-----
MI IChzCCA8CAQAwQjEhMB8GA1UEAwwYc3RvcnVmc9udC5jdHJhZHdhcmUuY29t
MQswCQYDVQQGEwJlTDEQMA4GA1UECgwHUmfkd2FyZTCCASIwDQYJKoZIhvcNAQEB
BQADggEPADCCAQoCggEBANBRXnTiDOcdkPsC6dgn9BkxAsdXuGIUk/Qbf8G0lnnl
dGKDzZvBwkW00yw/9aiZJAKhzeaCOblDFIyhFpwwMzoXDJu0ziuVXNu7zmjg1eE
P14OLRvxx55K3yVhXBqLTV1cpq1QuBjSltr9DgiD9bAjyUgxsA0J45aki7QBadIJ
xF9swaXC7Fg/r1W5jy5LbXDBaPUJPMU/s44lyVVLXqFbCgQo6HPLEk3zwIkxyeFD
JpoVi4pgolN7Cr6GtpwKk+nYqLoLXyIOJPEWZdyZ9mVaZZzphcW7QoLXfgdmfPMh
H8z2xNCu6hYMHn/nfZ6FY5KIjtEDN++k+2FamLtBuXUCAwEAAaAAMA0GCSqGSIb3
DQEBBQUAA4IBAQA+DNR2SpbVw2ilK8DW+G2t2yUBGuNDhvK3trSml7k0AXuI8Rfw
+1HK4M0q2o5X49qtNT6GXRI2esWfqI7sWgnlfhUzgg8QS6jLOVuvWPiYEK4TjggW
zXiOl5FY9H5LmPmQpekfUzBmgMi3p0VMoEuhkD/1Nqr0XzbLEKRSviEf+WF/0tMY
WI694ENqgnIfI1cPxp/v1f9rXEZhGZ1gSyAcPToWP5LXSGMMztzZcEnRv6BIsbs0
Rey8iqNMqd0RKCLMnRjpkWCRAtnRnM9x0+uih1FNRC9tFegphWs6q1DQpU7ylp7W
BunHxpBPm+nVUv6OvJK3/J1YWcxYpdCZ6L1w
-----END CERTIFICATE REQUEST-----
```

```
/c/slb/ssl/certs/cert 1
/c/slb/ssl/certs/import cert "1" text
-----BEGIN CERTIFICATE-----
MIID+TCCAuGgAwIBAgIEVeLGQDANBgkqhkiG9w0BAQsFAADBCMSEwHwYDVQQDDbhZ
dG9yZWZyb250LmN0cmFkd2FyZS5jb20xCzAJBgNVBAYTAlMMRAwDgYDVQQKDAAdS
YWR3YXJlMjB4XDTElMDgzMTEwMTUzMFoXDTE2MDgzMDEwMTUzMFowQjEhMB8GA1UE
AwwYc3RvcnVmc9udC5jdHJhZHdhcmUuY29tMQswCQYDVQQGEwJlTDEQMA4GA1UE
CgwHUmfkd2FyZTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBANBRXnTi
DOcdkPsC6dgn9BkxAsdXuGIUk/Qbf8G0lnnlDgKDzZvBwkW00yw/9aiZJAKhzeaC
ObldfFIyhFpwwMzoXDJu0ziuVXNu7zmjg1eEP14OLRvxx55K3yVhXBqLTV1cpq1Q
uBjSltr9DgiD9bAjyUgxsA0J45aki7QBadIJxF9swaXC7Fg/r1W5jy5LbXDBaPUJ
```



```
PMU/s441yVVLXqFbCgQo6HPLEk3zwIkxyeFDJpoVi4pgolN7Cr6GtpwKk+nYqLoL
XyIOJPEWZdyZ9mVaZZzphcW7QoLXfgdmfPMhH8z2xNCu6hYMHn/nfz6FY5KIjtED
N++k+2FamLtBuXUCAwEAAaOB9jCB8zAPBgNVHRMBAf8EBTADAQH/MBEGCWCgsAGG
+EIBAQQEAWICRDAYBglghkgBhvhCAQ0EJRYjQWx0ZW9uL05vcnRlbCBHZW5lcmF0
ZWQgQ2VydGlmaWNhdGUwHQYDVR0OBByEFJUnsHFT6ZErI8o8fd32FMZUi2NtMG0G
A1UdIwRmMGSFAJUnsHFT6ZErI8o8fd32FMZUi2NtoUakRDBCMSEwHwYDVQQDBhz
dG9yZWZyb250LmN0cmFkd2FyZS5jb20xCzAJBgNVBAYTAklMMRAwDgYDVQQKDAdS
YWR3YXJlZG9yYyZAMAsGA1UdDwQEAwIC5DANBgkqhkiG9w0BAQsFAAOCAQEARKDX
LVOp08G5wylvW2TKARUDRY0QYt1kMzj+GWZddL5RPm9s1CKZSOrNEV7Ql1kcvGor
jFfdN6cbvf2i3PqrbV22EVGBJUc3Qlksu8kq8qZibxnsyGEJIclInbunc7FsFw7
hTq0LgvXso/8v0rzJHYPw16pY6VLag1mnwF1sLm1AckQo/psvkxti1mt7CF2HsEA
E+PB0qTND8DTNT5zsITT2/G7sMZwFG6wqVUbg5uch/Besm3I5SwVqfrIzzDrDlm1
Hillre2bSdSHOV91y6x22zx3OFFjV110JEvIrKkrKbOU/F7FoxAB7+ZneGr6jaLx
HW05M5jcIOp8zZr5vg==
-----END CERTIFICATE-----
```

```
/c/slb/ssl
  on
/c/slb/ssl/sslpol 1
  name "SSL.Policy"
  ena
```

SLB Configuration

```
/c/slb/accel/caching
  on
/c/slb
  on
/c/slb/adv
  direct ena
  vstat ena
  submac "ena"
/c/slb/real 1
  ena
  ipver v4
  rip 192.168.141.21
  name "Citrix.WebAPP1"
```



```
/c/slb/real 2
  ena
  ipver v4
  rip 192.168.141.22
  name "Citrix.WebAPP2"
/c/slb/real 3
  ena
  ipver v4
  rip 192.168.141.34
  name "DDC.1"
/c/slb/real 4
  ena
  ipver v4
  rip 192.168.141.37
  name "DDC.2"
/c/slb/group 1
  ipver v4
  metric roundrobin
  add 1
  add 2
  name "xenDesktop.group"
/c/slb/group 2
  ipver v4
  metric roundrobin
  add 3
  add 4
  name "xenDesktop.DDC.Group"
/c/slb/port "1"
  client ena
  server ena
  proxy ena
/c/slb/port "2"
  client ena
  server ena
  proxy ena
/c/slb/virt 1
```



```
ena
ipver v4
vip 192.168.141.200
vname "StoreFront.VIP"
/c/slb/virt 1/service 443 https
group 1
rport 80
dbind forceproxy
tmout 20
ptmout 20
/c/slb/virt 1/service 443 https/http
comppol 1
xforward ena
connmgt ena 20
/c/slb/virt 1/service 443 https/ssl
svrvcert cert 1
sslpol 1
/c/slb/virt 2
ena
ipver v4
vip 192.168.141.205
vname "DDC.VIP"
/c/slb/virt 2/service 80 http
group 2
rport 80
pbind clientip norport
dbind forceproxy
tmout 20
ptmout 20
/c/l3/hamode vrrp
/c/slb/virt 1/service 443 https/pbind cookie insert
/c/slb/virt 1/service 443 https/http/rcount 1
/c/slb/layer7/httpmod 1
/c/slb/gslb
off
hostlk ena
```



```
/c/sys/access/https/cert WebManagementCert  
/c/sys/access/https/https e
```

Proxy NAT Configuration

```
/c/slb/pip/type port  
/c/slb/pip/add 192.168.141.201 1
```

Sync Configuration

```
/c/slb/sync  
  prios d  
  certs e  
/c/slb/sync/peer 1  
  ena  
  addr 192.168.141.5
```

Alteon NG Backup

Note: To enable Alteon configuration sync, use the command **/cfg/slb/sync** (run this command on the primary Alteon device once configuration of the backup device is completed as described below). Otherwise, SLB configuration on the backup device should be done manually, the same as on the active device.

Network Configuration

```
/c/sys/mgmt
  dhcp disabled
  addr 192.168.142.5
  mask 255.255.255.0
  broad 192.168.142.255
  gw 192.168.142.254
  ena
/c/sys/access
  tnet ena
/c/port 1
  pvid 5
/c/l2/vlan 1
  learn ena
  def 0
/c/l2/vlan 5
  ena
  name "VLAN 5"
  learn ena
  def 1
/c/l2/stg 1/clear
/c/l2/stg 1/add 1 2 5
/c/sys/access/sshd/ena
/c/sys/access/sshd/sshv1 dis
/c/sys/access/sshd/on
/c/l3/if 1
  ena
  ipver v4
  addr 192.168.141.5
```




```
vlan 5
/c/l3/gw 1
  ena
  ipver v4
  addr 192.168.141.254
```

VRRP Configuration

```
/c/l3/vrrp/vr 11
  ena
  ipver v4
  vrid 11
  if 1
  addr 192.168.141.4
/c/l3/vrrp/vr 12
  ena
  ipver v4
  vrid 12
  if 1
  addr 192.168.141.200
/c/l3/vrrp/vr 13
  ena
  ipver v4
  vrid 13
  if 1
  addr 192.168.141.205
```

Sync Configuration

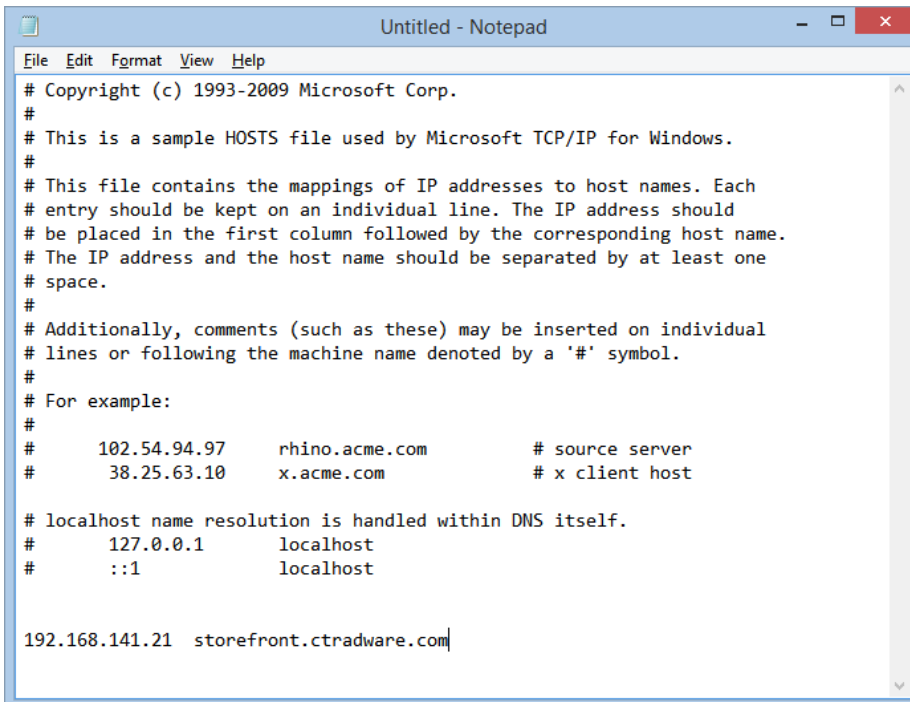
```
/c/slb/sync
  prios d
  certs e
/c/slb/sync/peer 1
  ena
  addr 192.168.141.3
```

PIP Configuration

```
/c/slb/pip/type port
/c/slb/pip/add 192.168.141.202 1
```

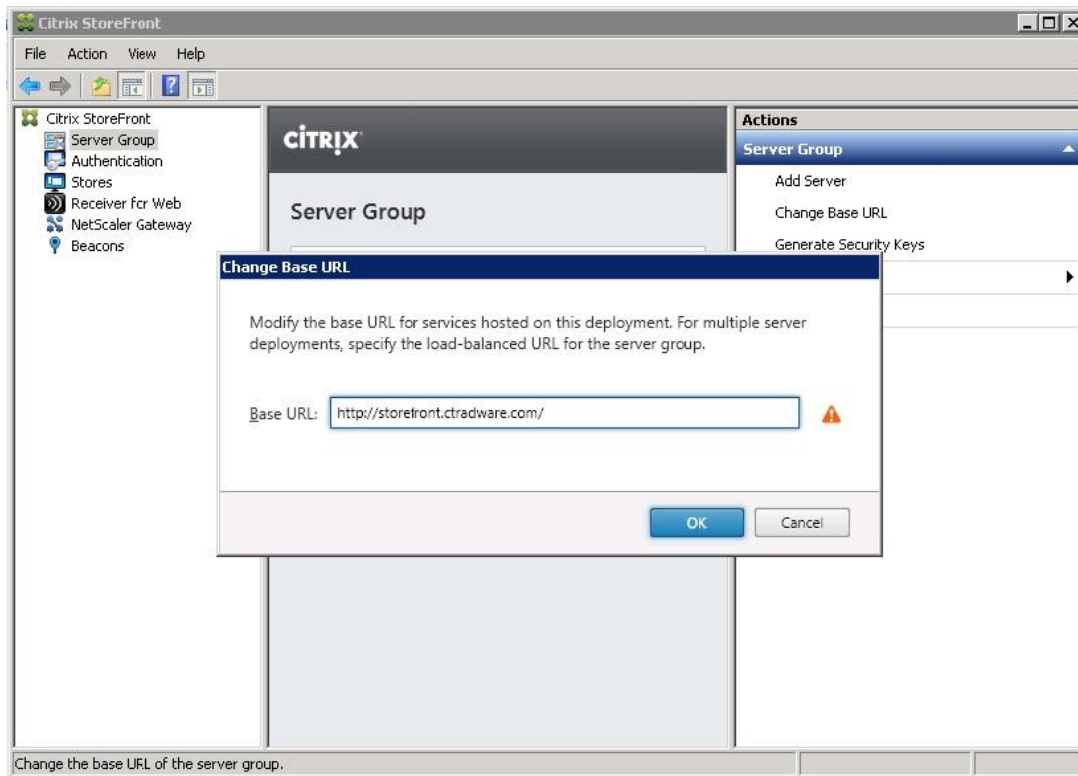
Citrix StoreFront Servers Configuration

1. Add the domain storefront.ctradware.com to the hosts file in each storefront server pointing to 192.168.141.21, and for the second StoreFront server 192.168.141.22.

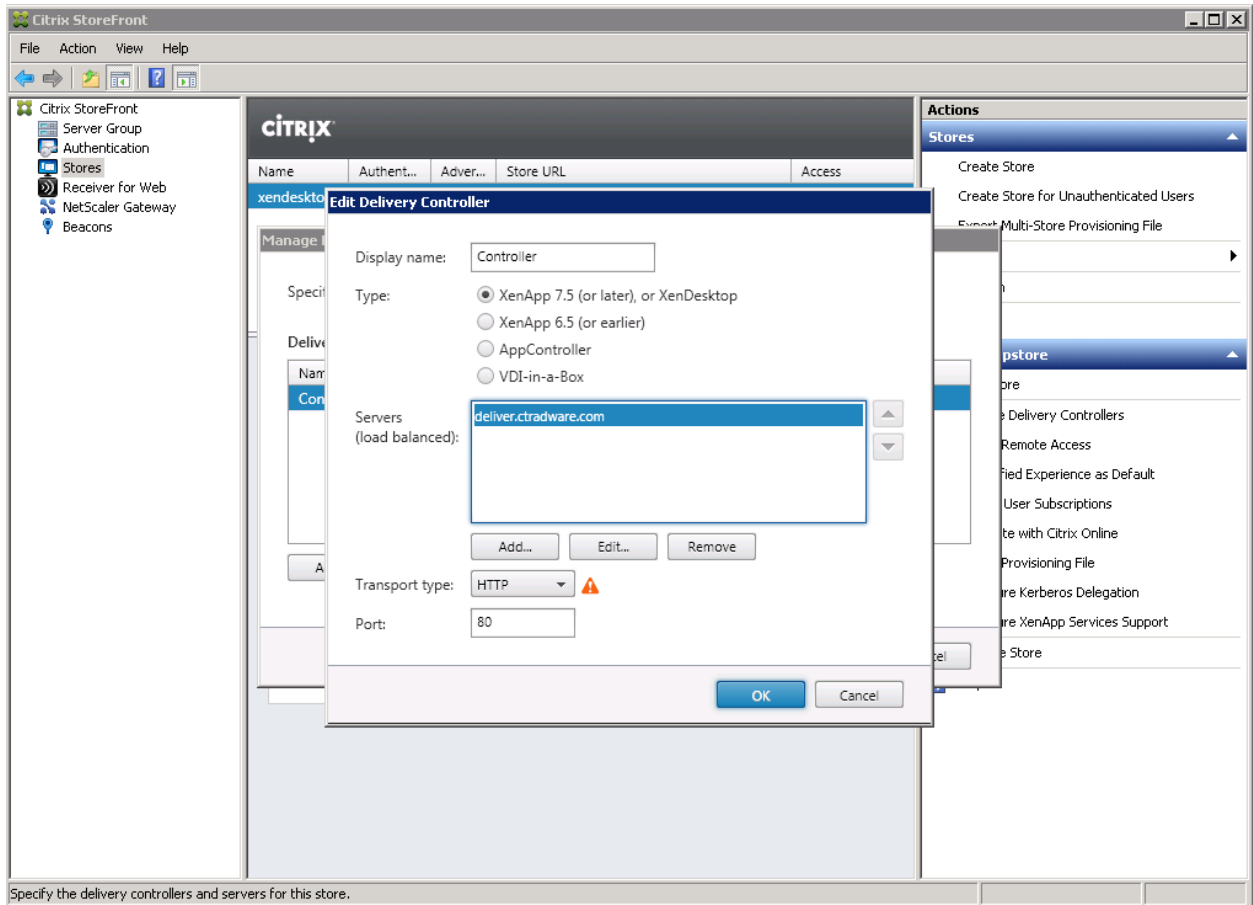


```
Untitled - Notepad
File Edit Format View Help
# Copyright (c) 1993-2009 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#       102.54.94.97       rhino.acme.com           # source server
#       38.25.63.10      x.acme.com              # x client host
#
# localhost name resolution is handled within DNS itself.
#       127.0.0.1        localhost
#       ::1             localhost
#
192.168.141.21 storefront.ctradware.com
```

2. Open the Citrix StoreFront management console
 - a. Go to **Server Group** and change the Base URL to <http://storefront.ctradware.com>.

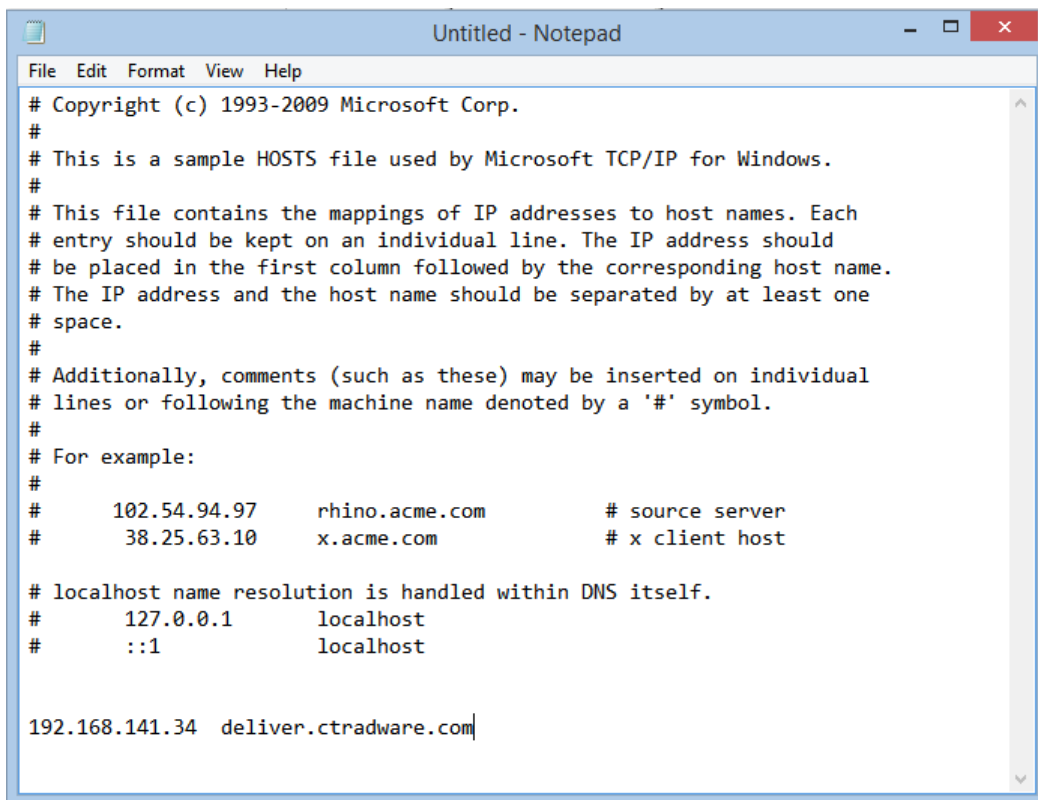


- b. Go to **Stores**, click **Manage Delivery Controllers**, and click **Edit** to add the Delivery controller server (the Alteon VIP 192.168.141.205, **deliver.ctradware.com**).



Citrix DDC Servers configuration

- Add the domain **deliver.ctradware.com** to the hosts file on each DDC server pointing to 192.168.141.34, and for the second StoreFront server 192.168.141.37.



```
File Edit Format View Help
# Copyright (c) 1993-2009 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#       102.54.94.97       rhino.acme.com       # source server
#       38.25.63.10      x.acme.com           # x client host

# localhost name resolution is handled within DNS itself.
#       127.0.0.1        localhost
#       ::1              localhost

192.168.141.34 deliver.ctradware.com
```



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