Renaming System Hosts

Release 1.3

Release #	Issue Date	Issued By	Summary
1.3	4/16/04	Karen Prieto	Updated link to hostname standards, added link to *Managing Sudoers*.
1.2	2/16/04		Added SSL caution & console rename to *Section 3.0*, added *Section 3.3 - Windows*, added NetBackup caution to *Section 3.4*, and added *Section 3.6*.
1.1	12/9/03		Added DBA follow-up steps, plus minor updates.
1.0	12/2/03		Initial release.
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Comments?

Trademarks

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1.0 Introduction

This document explains how to change hostnames on EDN Solaris®, HP-UX, and Windows® hosts. Intended readers are system and database administrators.

For formatting conventions and common acronyms, refer to *Documentation Conventions*[i]. *Table 1* lists acronyms used specifically within this document.

Table 1 Terms & Acronyms

Term	Definition
DC	Domain controller.
DHCP	Dynamic Host Configuration Protocol.
HA	High-Availability.
LDAP	Lightweight Directory Access Protocol
NIS	Network Information Service.
PDC	Primary domain controller.
SAM	Security Accounts Manager.

2.0 Overview

As part of network standardization efforts, most hostnames must be updated to comply with enterprise server naming conventions[ii]. Each hostname change must be accompanied by several configuration adjustments to prevent network outages. *Section 3.0* contains step-by-step instructions for these adjustments.

3.0 Procedure

Before changing a hostname, first submit a Network Change Notification[iii].

- If the host is a database server, CC the system's DBA.
- If the host is a NIS/NFS server, also notify the Ticket Storm administrator.

If the host is a database server, also schedule the name change with system's DBA. It is important that both system and database changes can be completed at the same time.

Caution:
If your server has an SSL certificate, you will need to reinstall the certificate after renaming the host (certificates are nodename-dependent). Make sure you have everything you need to reinstall the certificate before you rename the host.

When you (and the DBA, if applicable) are ready to change a hostname, do these steps:

1. Determine the correct hostname with the Hostname Generate Utility[iv].
2. Use the NIS Management Console[v] or LDAP Management Console[vi] (as appropriate) to update the *hosts.all* file:
   a. Delete the existing hostname entry.
   b. Create a new entry for the revised hostname, with the previous hostname as an alias.
   c. Delete the existing console entry (if applicable).
   d. Create a new console entry with the revised hostname.
   (For example, if *njfwcwstage* changes to *njfwcwvsd1*, its console would change to *njfwcwvsd1-console*.)
3. Notify the SAN administrator[vii] of the change, so that the host and disk array nicknames can be updated in SANavigator®.
4. If the host is in an Enterprise DNS domain, notify the DNS Coordinator[viii].
5. If the host is running:

	…then continue with:
Solaris®,	*Section 3.1*
HP-UX,	*Section 3.2*
Windows®,	*Section 3.3*

3.1 Solaris

6. Log in to the server via SSH, then *su* to root.
7. Run *change_hostname*.
   The *Appendix* on page 10 explains how to obtain this script and what it does.
8. Reboot:
   `shutdown -y -i6`
9. Do the follow-up steps in *Section 3.4*.

3.2 HP-UX

6. Log in to the server via SSH, then *su* to root.
7. Update the hostname in these files:
   - /etc/hosts
   - /etc/rc.configd.d/netconf
8. Change the node name:
   `uname -S <new hostname>`
9. Reboot:
   `shutdown -y -o 0`
10. Do the follow-up steps in *Section 3.4*.

3.3 Windows

6. If the host is a domain controller (DC), convert it to a standalone server:
   a. From the Windows **Start** menu, select *Run*.
      A Run dialog box opens.
   b. In the dialog box, enter `cmd` in the **Open** field, then click the **OK** button.
      A Command Prompt window opens.
   c. At the command prompt, enter:
      `* run dcpromo`
      A Yes/No prompt displays.
   d. Enter `No`.
      An uninstall script runs.
   e. When prompted, enter the password for the Security Accounts Manager (SAM) database.
   f. Restart the host.
      DHCP will be disabled after the restart.
   g. Wait approximately 45 minutes for replication to occur.

7. On the Windows desktop, right-click My Computer, then select *Properties* from the context menu.

   The System Properties dialog box opens (*Figure 1*).

8. In the dialog box, click the **Network Identification** tab.

9. Click the **Properties** button.

   The Identification Changes dialog box opens (*Figure 2*).

10. In the dialog box, update the **Computer Name** field, then click the **OK** button.

    The Identification Changes dialog box closes.

11. In the System Properties dialog box, click the **OK** button

    The System Properties dialog box closes.

12. Restart the host.

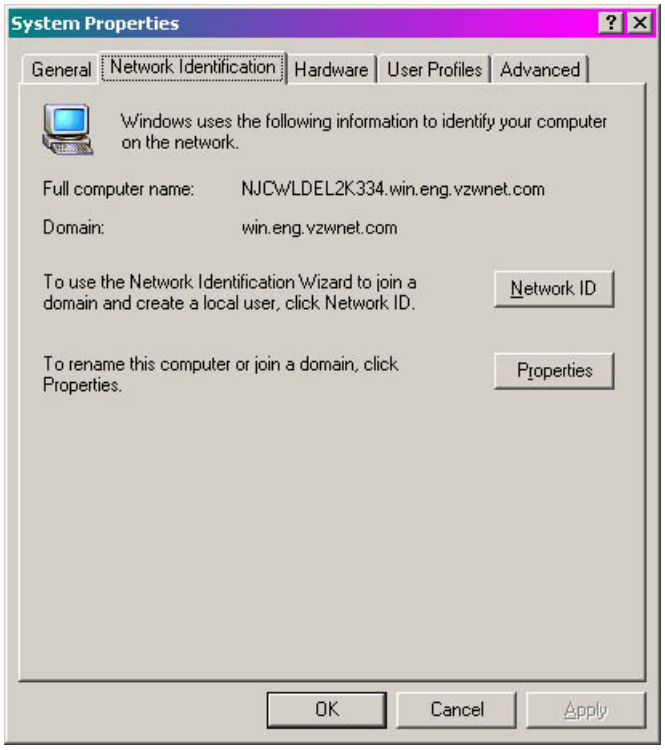

Figure 1

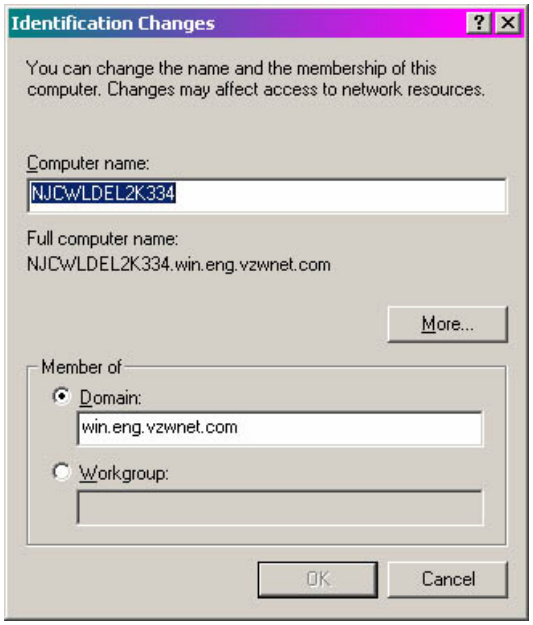

Figure 2

13. After the restart, select *Run* from the Windows **Start** menu.
    A Run dialog box opens.
14. In the dialog box, enter `cmd` in the **Open** field, then click the **OK** button.
    A Command Prompt window opens.
15. At the command prompt, enter:
    ```
    ipconfig /dns
    ipconfig /registerdns
    ```
16. If the host [was] a DC, do these steps:
    a. Wait approximately 45 minutes for replication to occur.
    b. At the command prompt, enter:
       `* run dcpromo`
       A prompt displays: "Join New or Existing?"
    c. Enter: `Existing`
       A prompt for the domain name displays.
    d. Enter: `win.eng.vnet.com`
       A password prompt displays.
    e. Enter the appropriate password.
       A script runs to add the host to the domain. When the script finishes, you will be prompted to restart the host.
    f. Restart the host and log into the domain.
    g. Run the DHCP Administrator tool and register the host as an authoritative DHCP server.
    h. Do the applicable steps in the "How to Promote to Domain controller" section of *Dell Server Regional Setup*[ix].
    i. For any printers or shared files on the DC, update the login scripts with the new hostname.
17. If the server is running NT, apply the supported workaround for an SQL Server 2000 issue described in Microsoft ® Knowledge Base Article 2816-42[x].

    Note:
    There is also an unsupported workaround, which involves creating and running this stored procedure in the MSDB database of this SqlServer instance: http://sqldev.net/download/sqlagent/sp_sqlagent_rename.sql.

18. Do the follow-up steps in *Section 3.4*.

3.4 SA Follow-Up Steps

1. If the host is a database server, ask the host's DBA to do the steps in *Section 3.5*.
2. Update the host's entry in the Remedy® **SH12:Server** and **SH19:ApplicationServerRelation** forms.
3. Update the host's entry in the inventory tool on the System and DB Administration site[xi].
4. Run a test *ping* against the host's previous name.
   If the ping is unsuccessful, make sure that the host's NIS or LDAP record includes an alias for the previous name.
5. If the host is running VERITAS® Volume Manager, configure Volume Manager:
   a. Update the diskgroup's hostname properties:
      ```
      cd /etc/vx
      vxdctl hostid <new hostname>
      ```
   b. Update the */etc/vx/volboot* file:
      ```
      vxdctl init <new hostname>
      vxdctl enable
      ```
      Caution:
      The *volboot* file must be updated with the *vxdctl* command (rather than by manually-editing the file). Also, the *volboot* file must be updated after the diskgroup's hostname properties are updated.
   c. Verify the volboot update:
      ```
      vxdctl
      ```
      The output should reflect the new hostname.
6. If the host is running VERITAS Cluster Server, update these */etc* files with the new hostname:
   - llthosts
   - llthosts.init.RAC (RAC setups only)
   - llttab
   - llttab.init.RAC (RAC setups only)
   - VRTSvcs/conf/sysname.

   These changes ensure that the cluster will start up.
7. If the host is a UNIX master/media server, do the steps in *Section 3.6*.
8. If the host is on the backup network, update the name of the backup interface to correspond with the hostname.
9. Update these backup-related items:
   - *bp.conf* on the backup client
   - *bp.conf* on the backup server
   - The policy on the backup server.

   Caution:
   Steps 7 & 9 are important for smooth operation of backups. If you do not update NetBackup™ to recognize the new hostname, queries and restore commands will need to be issued with the old hostname.

10. If the host is a *1S* box, configure Samba:
    a. Run Server Manager from one of the new PDCs:
       Type `svrmgr` in the Run box.
    b. Remove the old hostname.
    c. Add the new hostname.
    d. On the host, enter:
       `/usr/local/samba/bin/smbpasswd -j <Domain Name> -r <PDC>`
       For *<Domain Name>*, enter the Windows® domain. For *<PDC>*, enter the hostname of the PDC used in Steps a through c. For example: `/usr/local/samba/bin/smbpasswd -j WIN-VNET -r papmdc1`
    e. If resolution still doesn't work properly, add the new hostname to the PDC's *c:\winnt\system32\drivers\etc\hosts* file.
11. If the host is an NFS server, update the *auto.direct.nis* map on the appropriate NIS server(s).
12. If the host is a NIS server, do these steps:
    a. Update */usr/bam/sbin/push-usr-bam* on *hq-mail*.
    b. Update any application startup scripts.
13. If the host belongs to a system with a sudoers file (Prospect, for example), update the sudoers file with the new hostname. Refer to *Managing Sudoers*[xii].
14. Update hardware and cable labels.

3.5 DBA Follow-Up Steps

If the host is a database server, ask the host's DBA to do these steps:

1. Update these files to refer to the new hostname:
   - tnsnames.ora
   - listener.ora - global_names parameter
   - init.ora - db_domain parameter (and any other parameters that refer to hostname)
   - dbsnmp.
2. Rediscover the hostname in Enterprise Manager.
3. If the host is a backup server, update several files on the application servers that use this server as a catalog:
   - /etc/hosts
   - rmanhost
   - tnsnames.ora.
4. On the Master LDAP server, change the LDAP server entry in the instance that runs the LDAP server.

5. If the host is part of a high-availability (HA) cluster, update these passwords to match the host's new password:
   - listener
   - rman user.
6. On *njdbadm*, update the master tnsnames.ora file: */usr/apps/oracle/scripts/oldscripts/tnsnames/tnsnames.ora*.
7. Notify the DBA Lead[xiii] of the hostname change, so that the database instance spreadsheet can be updated.

3.6 Master/Media Follow-Up Steps

If the host is a UNIX master/media server, do these steps:

1. Back up the NetBackup catalog (*bp.conf* and *vm.conf*) files.
2. If the master server is also a media server, update the media server client images:
   `bpimage -newserver {newhostname} -oldserver {oldhostname}`
3. Use the Device and Media Manager to remove the volumes from robotic control.
   This moves them logically out of the library.
4. Modify the *bp.conf* and *vm.conf* files on the master server to reflect the new host name on the master.
5. Modify *bp.conf* file on a few clients to point to the new server name.
   (Once the server is working properly, you can modify the rest of the clients).
6. Use *tpconfig*, or the GUI, to reconfigure the library to point to the new hostname.
7. Stop and restart NBU services.
8. Inventory the library to introduce the tapes removed from robotic control.
9. Update the storage units to point to the new master hostname and insure that they are pointing to the robot properly.
10. Update the "NBU Catalog Backups to use the new "media server" name if the master and media server are the same.

    Note:
    This may not update properly using the GUI. Use *bpadm* instead (UNIX only).

11. Add the new master name and any new media servers server to *bp.conf* on UNIX clients, or to the configuration in W2K/NT clients
12. Test a restore of old data with the clients on which the *bp.conf* file was modified.
13. If Step 12 is successful, attempt to back up and restore new data on the same clients.
14. If Step 13 is successful, change the remaining client *bp.conf* files to point to the new server hostname.
15. If the Activity Monitor does not function immediately, go to "Activity Monitor" <File><Change Master Server> and enter the new hostname.
16. If the Java Admin Client reflects the old hostname, update the *nbj.conf* file with the new name.
17. If the customer is using *vault*, change the vault *dup_param* files and the appropriate *robot_inventory* files.
18. Ensure that the customer updates any scripts that may have hard-coded hostname entries in them.

4.0 Appendix

Solaris hostname changes can also be accomplished using the *sys-unconfig* Solaris command. Unfortunately, *sys-unconfig* also wipes out multiple configuration settings, and should not be used without first taking snapshots of the */etc* and */var/yp* directories. Some SAs do not recommend *sys-unconfig* for hostname changes, which is why *Section 3.1* uses the internally-developed *change_hostname* script. This script applies only hostname-related changes, automatically creates backup copies, and can reverse all changes with a single command.

The change_hostname script can be download via anonymous FTP on the team FTP server.

- *Section 4.1* lists all changes performed by change_hostname (in case you prefer to do them manually).
- *Section 4.2* lists some of the tasks performed by *sys-unconfig* (to give you an idea of its impact).

4.1 Summary Of change_hostname

The *change_hostname* script updates the hostname in these files:

- /etc/hosts

  The original hostname is retained in */etc/hosts* as an alias.

- /etc/hostname.*<active interface>*

  Note:
  To identify the active interface, use the *netstat -i* command.

- /etc/nodename
- /etc/net/ticlts/hosts

  Note:
  For each */etc/net/*/hosts* file, the hostname is changed in both columns.

- /etc/net/ticots/hosts
- /etc/net/ticotsord/hosts
- /etc/inet/ipnodes
  (If it exists.)

4.2 Summary Of sys-unconfig

The *sys-unconfig* command performs these major tasks:

- Removes the */etc/host* file (Although it does save a copy in */etc/inet/hosts.saved*).
- Removes all NFS entries from */etc/vfstab*.
- Wipes out all */etc/hostname.interface* files.
- Removes the */etc/defaultdomain* file
- Resets the */etc/TIMEZONE* file to PST8PDT (Pacific TimeZone).
- Removes the entries in */etc/net/tic*/hosts* files.
- Removes the */etc/netmasks* file.
- Removes the */etc/defaultrouter* file.
- Removes the root password from the */etc/shadow* file.
- Removes */etc/resolv.conf* file.
- Disables LDAP by removing */var/ldap/** files.
- Removes all files in the */var/yp* directory.

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[i] http://internal.link.to.doc

[ii] http://internal.link.to.page

[iii] http://internal.link.to.form

[iv] http://internal.link.to.page

[v] http://internal.link.to.page

[vi] http://internal.link.to.page

[vii] mailto:user@mail.com

[viii] mailto:user@mail.com

[ix] http://internal.link.to.doc

[x] http://support.microsoft.com/default.aspx?scid=kb;en-us;281642&Product=sql2k

[xi] http://internal.link.to.page

[xii] http://internal.link.to.doc

[xiii] mailto:user.mail.com