

# 2018 SOLIDWORKS PDM Professional Archive Server Install

This guide is written for SOLIDWORKS PDM Professional 2018. This guide can be used if you are using an earlier version because the general process is very similar.

The role of the archive server is to store and host the physical files that are saved into the file vault, as well as managing the users and their credentials for the SOLIDWORKS PDM Professional system. In order for a user to access the files, they must connect to one of the archive servers hosting the files.

This document covers loading the archive server components and configuration of the archive server to access it.

Hawk Ridge Systems highly recommends taking a moment before installing SOLIDWORKS and checking that you are ready to load your new software. First, ensure that your computer meets [minimum system requirements](#) and that your [video card passes certification checks](#). Also, confirm that the hard drive has enough space to have at least 15% free space after the full installation. Back-up data such as any shared Toolbox library, Design Library, Template files, or a data management vault. As always, verify workmates, customers, or vendors are all on the same version of SOLIDWORKS. Older versions of SOLIDWORKS cannot open files from newer versions.

This is not a troubleshooting guide. If you have any technical issues with SolidWorks, please contact [Hawk Ridge Systems technical support](#).

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# SOLIDWORKS PDM Professional Archive Server

The archive server service runs from the system it is installed on in order to send and receive files from the users.

***To reduce the chance of problems coming from attaching to the archive server, it is recommended that the server name is 15 characters or less.***

## Before Installation

Set up the users, accounts and permissions required to complete the archive server installation.

### Root folder access

Full access must be granted to the system account in order for it to create the folders and files in the designated root folder of the archive server. Alternatively, the root folder can be located on a network share as long as the archive server service has the ability to read and write files to it.

***The log-on account can be changed in the service properties under the archive server service.***

### SQL user account

A SQL user with at least db\_owner permissions to any existing file vault databases on the SQL server is required to relay information with the file vault.

Typically, the default **sa** account created during the SQL server installation is used.

## User and group accounts

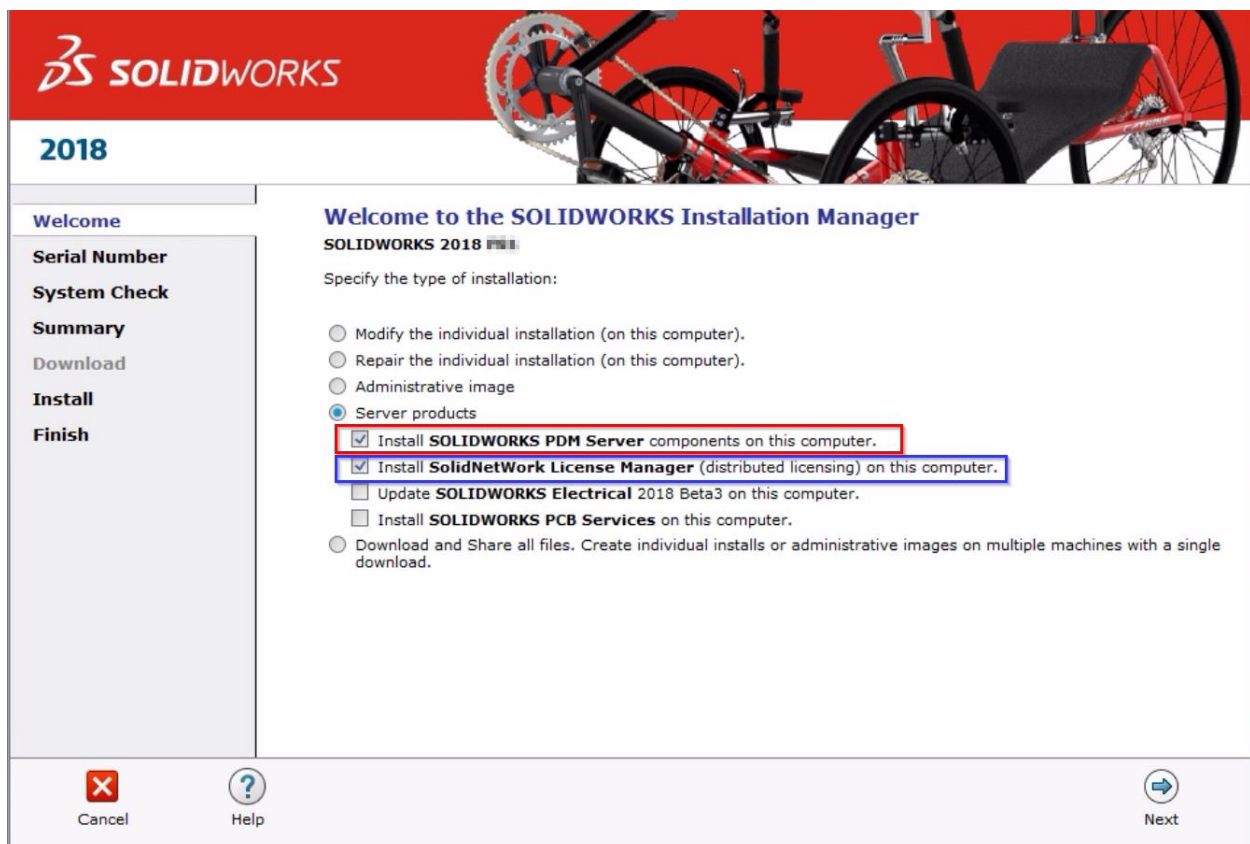
In order to specify the access rights for users and groups during the install, create them beforehand.

**To use domain users, create a domain group on the controller containing the users who will be accessing the PDM vault.**

1. Add the domain group using the Find User or Group dialog during the install. Users will then populate into the PDM administration tool.
2. Afterwards, you can add or change the user and groups using the Archive Server Configuration tool.

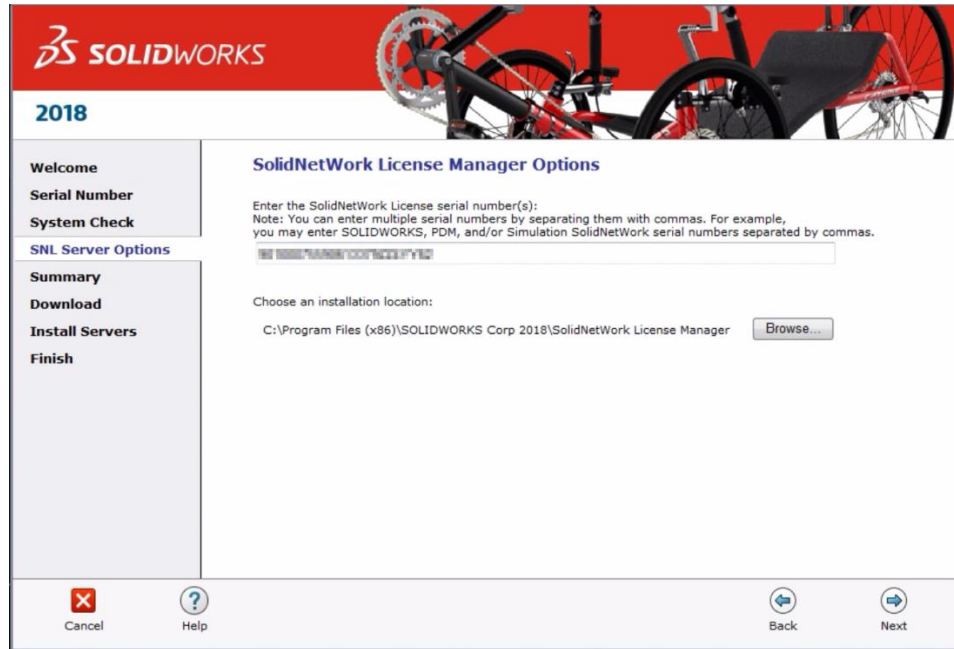
## Performing the Archive Server Installation

1. Login to the system under a user that has local administrative rights.
2. Insert your SOLIDWORKS 2018 DVD or execute the "Setup.exe" file to begin the installation.
3. You will be shown the following screen. Click the Server products radio button and Install SOLIDWORKS PDM SERVER as well as Install SolidNetWork License Manager if a 2018 version is not yet installed.

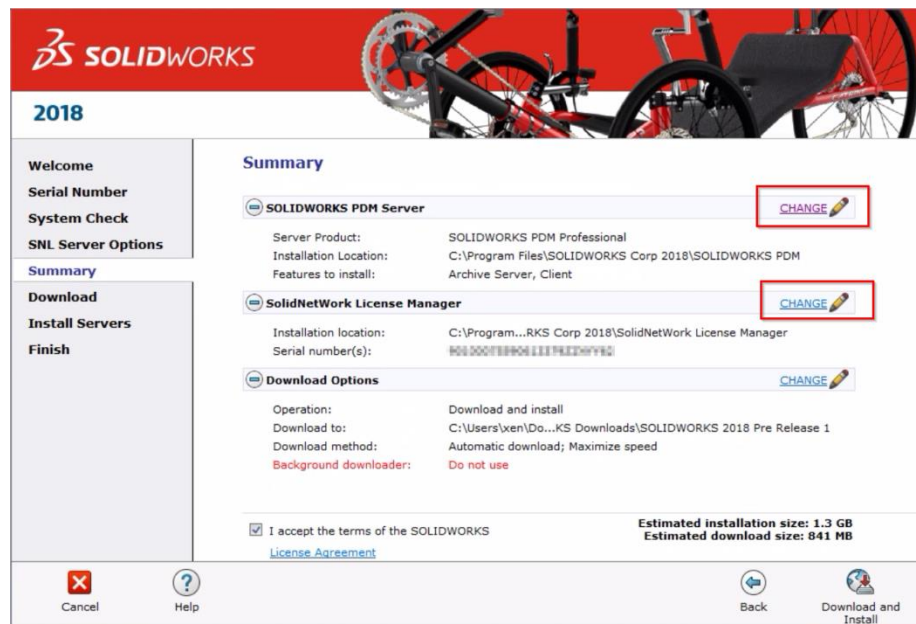




- You may add the EPDM serial number(s) in the SolidNetWork License Manager Screen if you selected to have this installed.

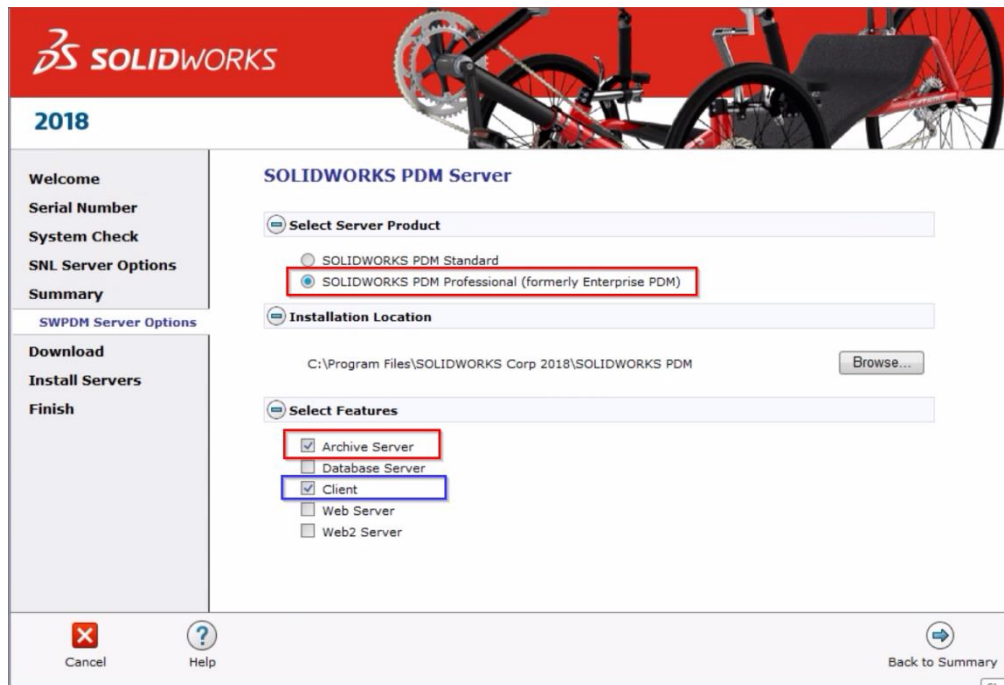


- Click on the Change button to the right of the SOLIDWORKS PDM Server label. You may also select the Change button to the right of the SolidNetWork License Manager if you need to update any serial number information.





6. Select SOLIDWORKS PDM Professional (formerly Enterprise PDM) as well as Archive Server. You may select Database server and client as well if you wish to put these on this same machine. We generally recommend that a PDM client be installed on any machine acting as a primary or replicated archive server.

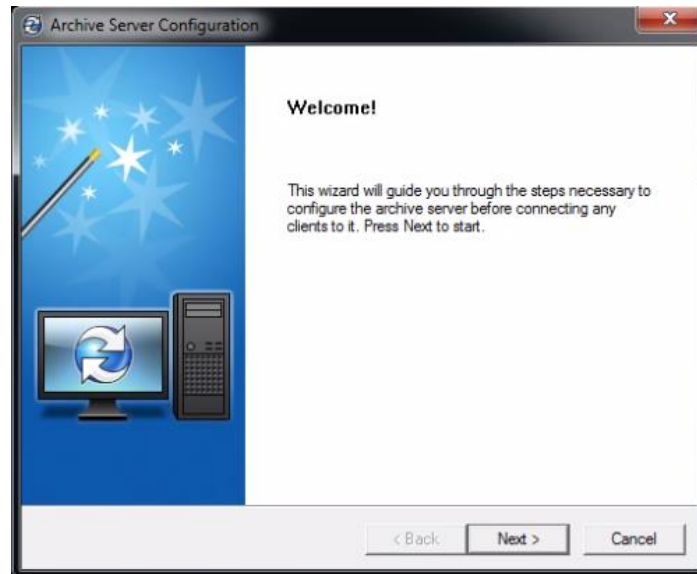


7. You may now click Back to Summary and Install Now.

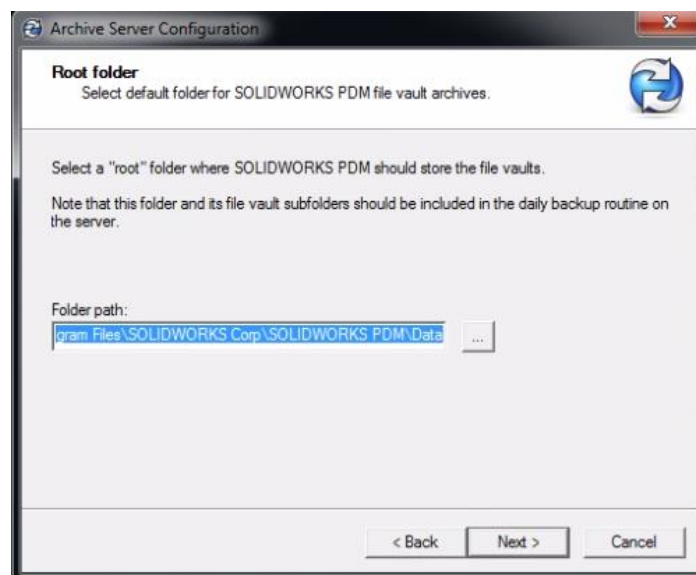
# Configuring the Archive Server

Once the initial installation has completed, complete the configuration using the following instructions:

1. Select **Next** on the welcome screen.



2. Select the folder path to where the root folder of the SOLIDWORKS PDM Professional vault should be installed and select **Next**. The location chosen will contain all of the physical files in your PDM vault. Make sure this location is on a hard drive with plenty of available disk space.

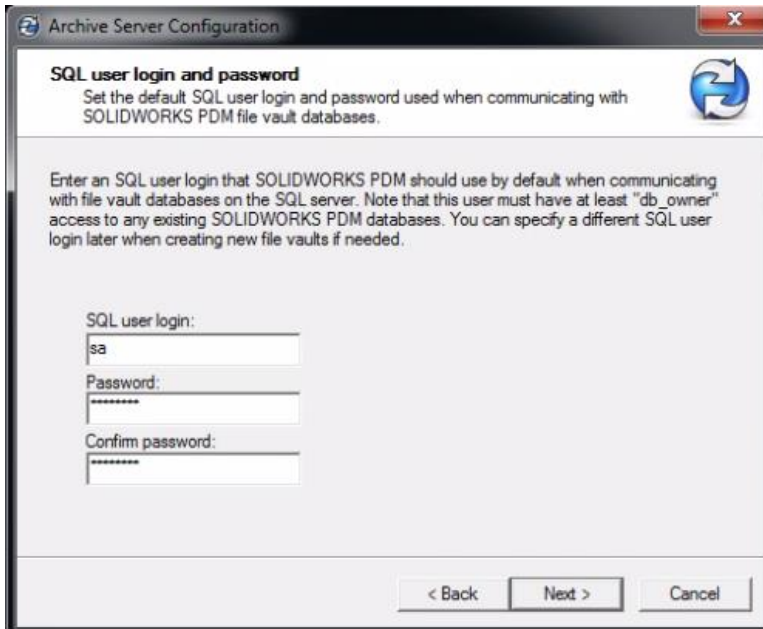


3. Enter a password for the default "Admin" user and select **Next**.



The screenshot shows a window titled "Archive Server Configuration" with a sub-header "Admin password". Below the sub-header is the instruction "Set the default admin login password." and a refresh icon. The main text reads: "Select a password for the default 'Admin' user. The 'Admin' user is always present in a SOLIDWORKS PDM file vault and is the only user present in a newly created vault." There are two input fields: "Password:" and "Confirm password:", both containing masked characters (asterisks). At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

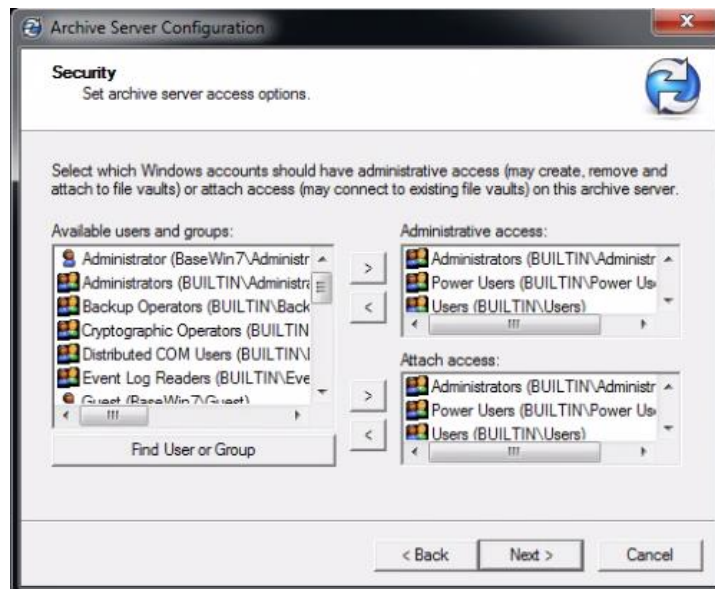
4. Input the SQL user and password that SOLIDWORKS PDM Professional will use to log into the SQL server and select **Next**.



The screenshot shows a window titled "Archive Server Configuration" with a sub-header "SQL user login and password". Below the sub-header is the instruction "Set the default SQL user login and password used when communicating with SOLIDWORKS PDM file vault databases." and a refresh icon. The main text reads: "Enter an SQL user login that SOLIDWORKS PDM should use by default when communicating with file vault databases on the SQL server. Note that this user must have at least 'db\_owner' access to any existing SOLIDWORKS PDM databases. You can specify a different SQL user login later when creating new file vaults if needed." There are three input fields: "SQL user login:" (containing "sa"), "Password:", and "Confirm password:", all containing masked characters (asterisks). At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".



5. Select the Windows accounts/groups that should have either normal or administrative access and select **Next**. Adding users or groups here tells the Archive Server to grant attach or admin access for these users/groups. Without the appropriate access permissions, users will be forced to authenticate against the archive server when they attempt to add their local vault view. The result would be the user being prompted with a PDM login window that shows the PDM server computer name and would require the user to enter in a Windows user name and password (local or domain admin) in order to authenticate.

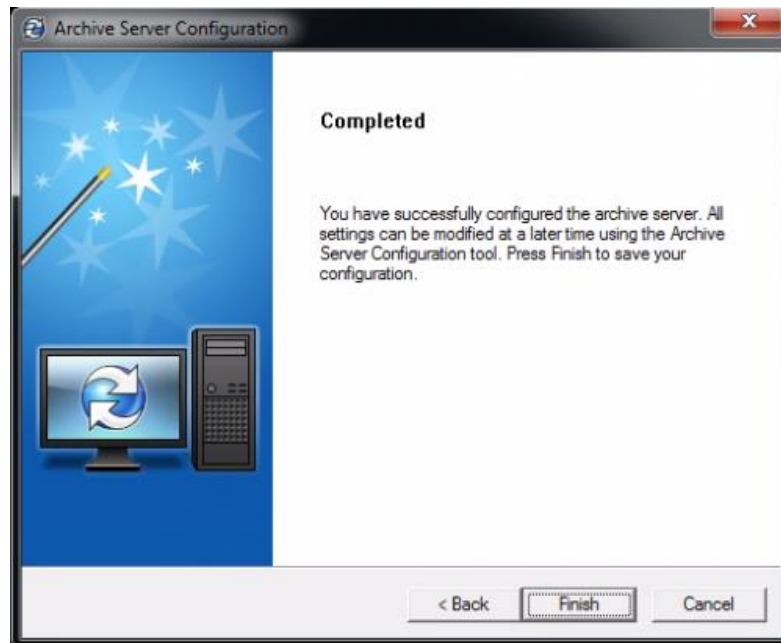


6. Choose the default login type for the SOLIDWORKS PDM Professional vault and select **Next**.





7. Complete the installation by selecting **Finish**.



## Opening Ports for Client/Server Communication

Newer Windows operating systems have built-in software firewalls that are enabled by default. These features can restrict network access to applications requiring connections over the TCP/IP interface.

In order for the archive server to communicate with the client systems, TCP port 3030 must be fully opened in the firewall.

You should also open up the UDP port to allow the server to announce itself, by name, on the network. This means that the users will see the name of the server in the drop-down list.

The ports required to be open for the SQL server to talk with the client systems are TCP ports 1433 and 1434. SOLIDWORKS PDM Professional Web Server requires ports 80 and 443 to be open.

Communication Originating Form					
Listening/Receiving	Client	Archive Server	Database Service	SQL Server	Web Server
Client					
Archive Server	3030	3030	3030		3030
Database Service					
SQL Server	1433/1434	1433/1434	1433/1434		1433/1434
Web Server	80/443				

Microsoft disables outbound filtering by default. However, your administrators may have created outbound rules that restrict traffic to approved applications on your network. If the client or replicated server can't reach the SQL or Archive server, ensure that the ports are not restricted in the firewall settings.

## Adding Archive Servers in WAN Environment

SOLIDWORKS PDM Professional clients are normally set up to communicate with the Archive and SQL server using the server system names. The names must be able to resolve to the correct IP addresses.

If the name lookup fails, or is slow, it can cause the following problems:

1. Clients can't find the servers, a common issue when using subnets or WAN configurations.
2. Performance degradation using EPDM such as logging in, browsing, or adding files.
3. Archive Server replication failures.

### Verifying That the Server Name Can Be Resolved

To ensure optimal performance, make sure that the DNS server configuration is set up to resolve names correctly and efficiently.

1. Open the command prompt by clicking Start → Run → CMD.
2. Type *ping <server\_name>*.

If the server can be reached by name, a reply with the server IP address appears. For example:

```
PING SRV-DEV-15
```

```
Reply from 192.168.1.71: bytes=32 time<1ms TTL=128
```

3. Verify that the correct IP is returned

If DNS returns the wrong IP address, a different system than the server responds.

If the server name cannot be resolved, the DNS server configurations is not correctly configured. For example:

```
PING SRV-DEV-15
```

```
Ping request could not find host SRV-DEV-15. Please check the name and try again.
```

### Configuring the Hosts File to Resolve the Server Name

If the DNS servers cannot be configured, or performance is still bad, update the client's hosts file with the correct server name and IP address. This ensures that the hosts file is queried for the server address directly instead of waiting for the DNS name to resolve.

To configure the hosts file to resolve the server name:

1. On the SOLIDWORKS PDM Professional client, locate the Hosts file.  
The default location is:  
*C:\Windows\System32\Drivers\Etc*
2. Open the file in a text editor. (such as Notepad)
3. Add a new line and enter the server IP address followed by the server name.

For example:

```
192.168.1.71 SRV-DEV-15
```

4. Repeat Step 3 for any additional servers used by SOLIDWORKS PDM Professional
5. Save and close the hosts file.