DNA Master Installation Guide

1. Minimum System Requirements for Installation of DNA Master

<table>
<thead>
<tr>
<th>PC Minimum Requirements</th>
<th>Mac Minimum Requirements</th>
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<tr>
<td>OS: Windows XP/Vista/7 32-bit or 64-bit</td>
<td>OS: Mac OS X 10.5 or Higher</td>
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<tr>
<td>CPU: Dual-core Processor 1.8GHz</td>
<td>CPU: Dual-core Intel Processor 1.8GHz</td>
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<tr>
<td>Memory (RAM):</td>
<td>• Non-Intel Macs are NOT supported.</td>
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<tr>
<td>• XP: 1GB</td>
<td>• 2GB</td>
</tr>
<tr>
<td>• Vista/7: 2GB</td>
<td>Video Memory: 128MB</td>
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<td>Video Memory: 128MB</td>
<td>Free Disk Space: 25GB</td>
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<tr>
<td>Free Disk Space: 5GB</td>
<td>DVD Drive</td>
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<tr>
<td>DVD Drive</td>
<td>INTERNET CONNECTION</td>
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<tr>
<td>INTERNET CONNECTION</td>
<td>FULL ADMINISTRATOR RIGHTS</td>
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</tbody>
</table>

2. Installing DNA Master on a Windows Computer

**IMPORTANT:** For Vista/Windows 7 users, this program must have full administrative rights. It is not sufficient to install this program on a User account with administrative-level rights, you must specify that the program has these rights too. During installation or when starting the program once installed, press “Yes” or “OK” if you are prompted to allow the program to continue, failing to do so WILL NOT allow the program to run properly and WILL cause errors. One easy way to make sure the program always has admin rights is to create a short-cut for the program as outlined below. If the program is then ALWAYS run from this short-cut, odd error messages should not occur. Otherwise, when starting the program, right-click on the program icon, and select “Run as administrator” every time.

**DNA Master Installation**
- DNA Master can be downloaded at the following link:
  http://cobamide2.bio.pitt.edu/computer.htm
- Double click the installer, and follow the instructions to install the program.

**Shortcut Creation**
- Navigate to the DNA Master directory:
  32-bit OS: My Computer \ C:/Program Files/DNA Master
  64-bit OS: My Computer \ C:/Program Files(x86)/DNA Master
- Right-click on “DNAMas.exe” and select “Create Shortcut”
  Windows XP: Drag the shortcut to the desktop.
  Windows Vista/7: Click “Yes” on the dialogue box.
- **Windows Vista/7 Users Only—MUST confer admin rights to the program:**
  Right-click on the newly created desktop shortcut:
  - Click properties
  - Click on the “Compatibility” tab
  - Check the box next to “Run as Administrator” under “Privilege Level” at the bottom
  - Click “OK”
Updating – INTERNET CONNECTION REQUIRED
- Double click your DNA Master shortcut.
- Go to Help → Update DNA Master
- Allow the update to run and restart the program.
- DNA Master is now updated and ready to use.

DNA Master is now installed and up-to-date. You can run it through the desktop shortcut.

3. Installing DNA Master on a Mac

To install DNAMaster on your Mac, you will need to install Windows as a second operating system on an emulator such as VirtualBox (http://www.virtualbox.org/wiki/Downloads). If you already have access to Windows on your Mac, skip down to “DNA Master Installation”. Once you have downloaded and installed VirtualBox, as per the VirtualBox website instructions, install Windows as below:

Windows Image Installation
- Obtain a copy of Windows XP, Vista, or 7 32-bit edition.
  - Windows XP is the cheapest option, and requires the least resources.
- Open VirtualBox.
- Click “New” to create a new virtual machine.
- Click “Continue”
- Name the machine “Windows”
- Under the “Operating System” menu choose “Microsoft Windows”
- Under the “Version” menu choose the version you are installing
- Click “Continue”
- For Windows XP, allocate at least 512MB memory, Vista/7 requires >1GB.
- Click “Continue”
- Check the box for “Boot Hard Disk”
- Click the “Create new hard disk” option.
- Click “Continue”
- Click “Continue”
- Click “Dynamically expanding storage”
- Click “Continue”
- Set the starting size of the virtual storage using the slider to a minimum of 20GB.
- Click “Continue”
- Click “Finish”
- Click “Finish”
- Now start the machine by selecting it from the list to the left and clicking “Start”
- Click “Continue” when the first run wizard starts
- Insert your Windows Installation Disk. Ignore any autorun prompts.
- The dialogue in the middle should read “Host Drive” followed by a letter.
- Click “Continue”
- Click “Finish”
- Follow the instructions on-screen to install your copy of Windows.
- After the installation completes, close the virtual machine.
- Click “Machine”
  - Click “Shut Down”
- In the main window, click the settings button.
- Click on the display tab.
- Set the “Video Memory” to 64MB.
- Save the changes.
- Select the new machine in the main window and click “Start” to run it!

*Note: It is recommended that you update your copy of Windows before continuing

**DNA Master Installation (Within your Windows Virtual Machine)**

- DNA Master can be downloaded at the following link:
  [http://cobamide2.bio.pitt.edu/computer.htm](http://cobamide2.bio.pitt.edu/computer.htm)
- Double click the installer, and follow the instructions to install the program.

**IMPORTANT:** For Vista/Windows 7 users, this program must have **full administrative rights**. It is not sufficient to install this program on a User account with administrative-level rights, you must specify that the program has these rights too. During installation or when starting the program once installed, press “Yes” or “OK” if you are prompted to allow the program to continue, failing to do so WILL NOT allow the program to run properly and WILL cause errors. One easy way to make sure the program always has admin rights is to create a short-cut for the program as outlined below. If the program is then **ALWAYS** run from this short-cut, odd error messages should not occur. Otherwise, when starting the program, right-click on the program icon, and select “Run as administrator” every time.

**Shortcut Creation**

- Navigate to the DNA Master directory:
  - 32-bit OS: My Computer -> C:/Program Files/DNA Master
  - 64-bit OS: My Computer -> C:/Program Files(x86)/DNA Master
- Right click on “DNAMas.exe” and click “Create Shortcut”:
  - Windows XP: Drag the shortcut to the desktop.
  - Windows Vista/7: Click “Yes” on the dialogue box.

**Windows Vista/7 Users Only—MUST confer admin rights to the program:**

- Right Click on the newly created desktop shortcut:
  - Click properties
  - Click on the “Compatibility” tab
  - Check the box next to “Run as Administrator” under “Privilege Level” at the bottom
  - Click “OK”

**Updating – INTERNET CONNECTION REQUIRED**

- Go to Help → Update DNA Master
- Allow the update to run and restart the program.
- DNA Master is now updated and ready to use.

DNA Master is now installed and up-to-date. You can run it through your desktop shortcut.