



iCEcube2 Installation Guide

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Platforms Supported

iCEcube2 Tools

iCEcube2 - Windows Installation

- Assemble required materials
- Perform the installation
- Verify installation success

iCEcube2 – Linux Installation

Uninstall/Modify iCEcube2

Floating License Setup

Appendix A: Node Locked License File Troubleshooting.

Appendix B: Install iCEcube2 on Vista Home.

Node-locked License

- Windows 10, 32-bit / 64-bit
- Windows 8/8.1 OS, 32-bit / 64-bit
- Windows 7 OS, 32-bit / 64-bit
- Red Hat Enterprise Linux WS 4, 5, and 6

Floating License Server

- Windows 10, 32-bit / 64-bit
- Windows 8/8.1 OS, 32-bit / 64-bit
- Windows 7 OS, 32-bit / 64-bit
- Red Hat Enterprise Linux WS 4, 5, and 6

iCEcube2 Tool Suite consists of Synthesis, Place and Route and Simulation tool sets.

Features	Windows OS	Linux OS
iCEcube2 Core Tools	Yes	Yes
Lattice Synthesis Engine(LSE)	Yes	Yes
Synplify-Pro Synthesis	Yes	Yes
Integrated ModelSim Simulator	Yes	Yes
Lattice Diamond Programmer**	Yes	Yes

**** Lattice Diamond Programmer run in standalone mode is required to program Lattice iCE devices.**

ASSEMBLE REQUIRED MATERIALS

Download the latest iCEcube2 installer from Lattice website.

<http://www.latticesemi.com/products/designsoftware/icecube2/downloads.cfm>

- Registration is required prior to download

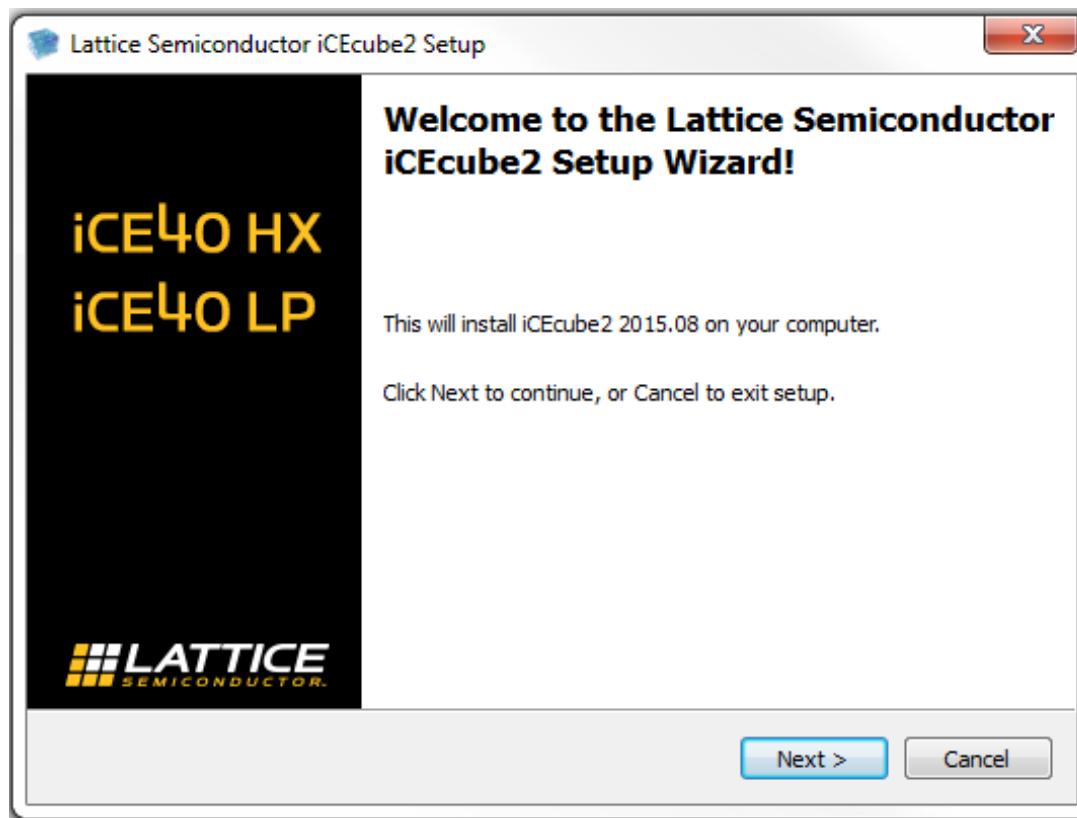
Download and install the latest Lattice Diamond Standalone Programmer from Lattice website.

<http://www.latticesemi.com/Products/DesignSoftwareAndIP/ProgrammingAndConfigurationSw/Programmer.aspx>

Request the license file from lattice admin(lic_admn@latticesemi.com). License file enables the iCEcube2 IDE, Synplifypro synthesis tool and the ModelSim simulator.

- Node-Locked License (Windows only)
 - Launch “cmd” console, type “ipconfig –all” to get the MAC ID of the system.
 - Submit your MAC ID to Lattice. If Virtual Machine (e.g. Remote Desktop) is used, the MAC address required by the license is the MAC address of that Virtual Machine, not the machine in which the user is physically using.
- Floating License (Linux & Windows)
 - Submit the MAC ID of your license server to Lattice.
 - Windows
 - Launch “cmd” console, type “ipconfig /all” to get the MAC ID.
 - Linux
 - Type “ifconfig –a”. The Ethernet HWAddr gives the required MAC ID.
 - You will need to modify the license file to include your license server name and port information.

Launch the iCEcube2 windows installer

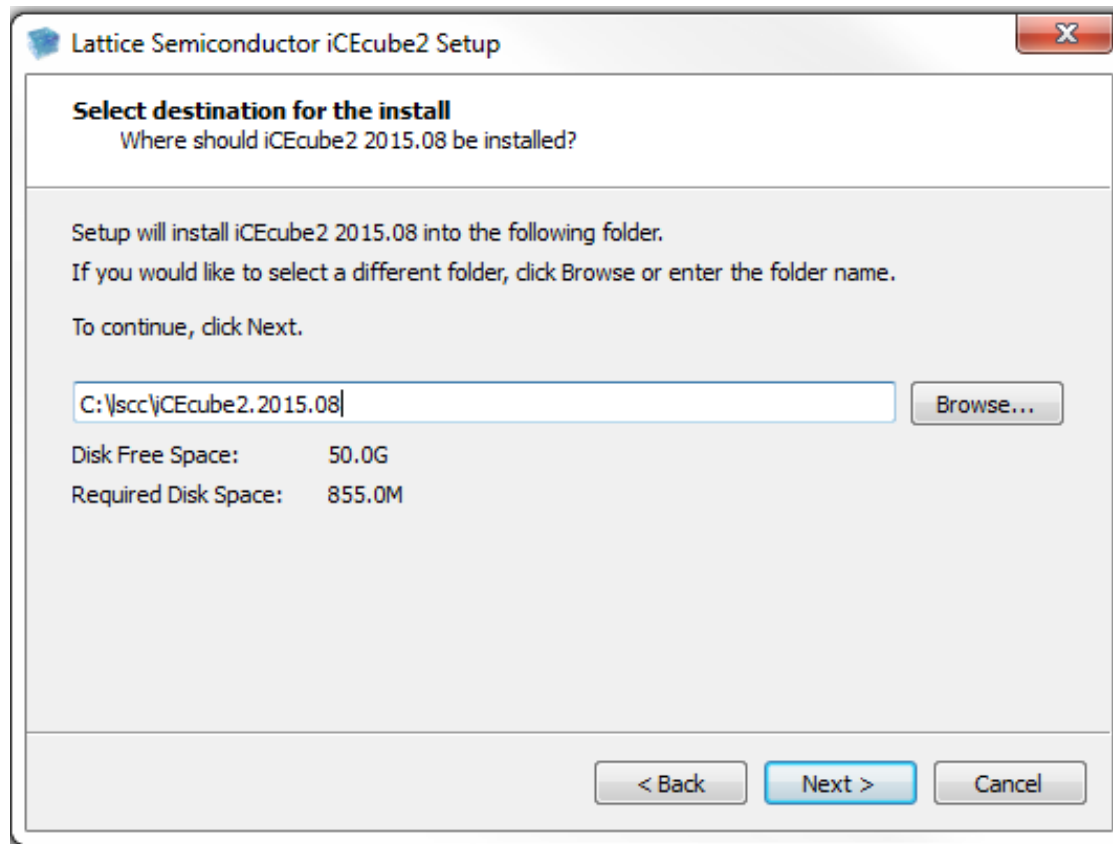


Accept the license agreement



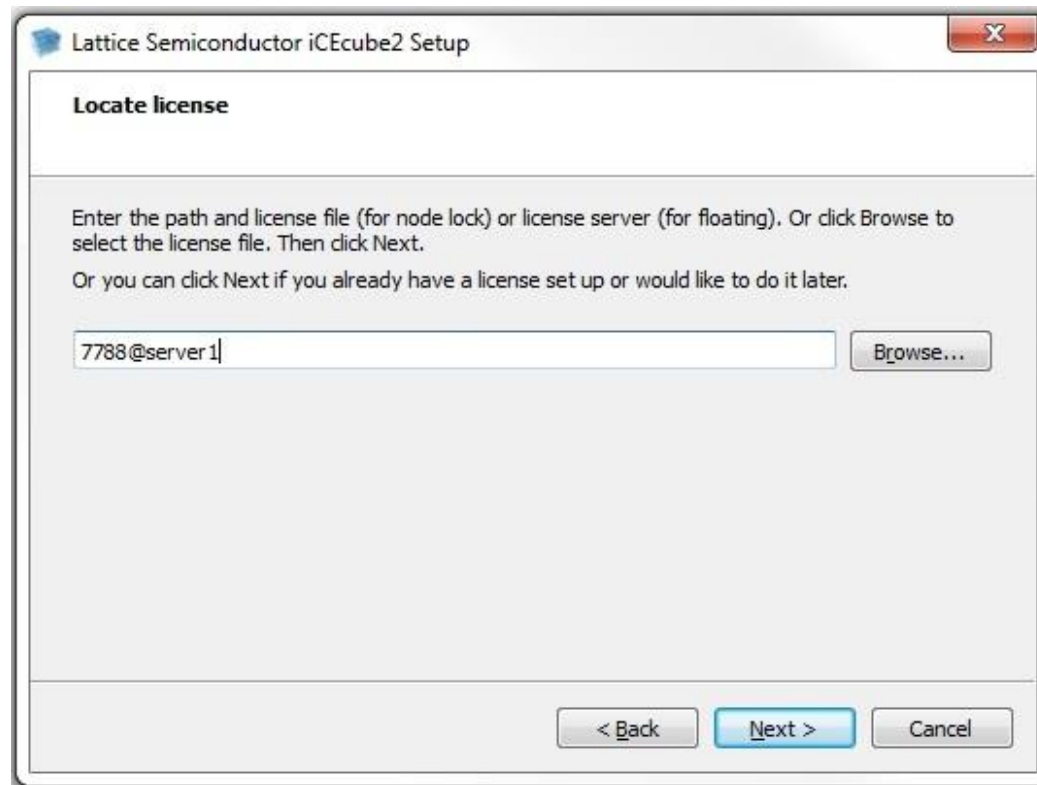
Select the installation directory

- Default location is recommended
- No spaces are allowed

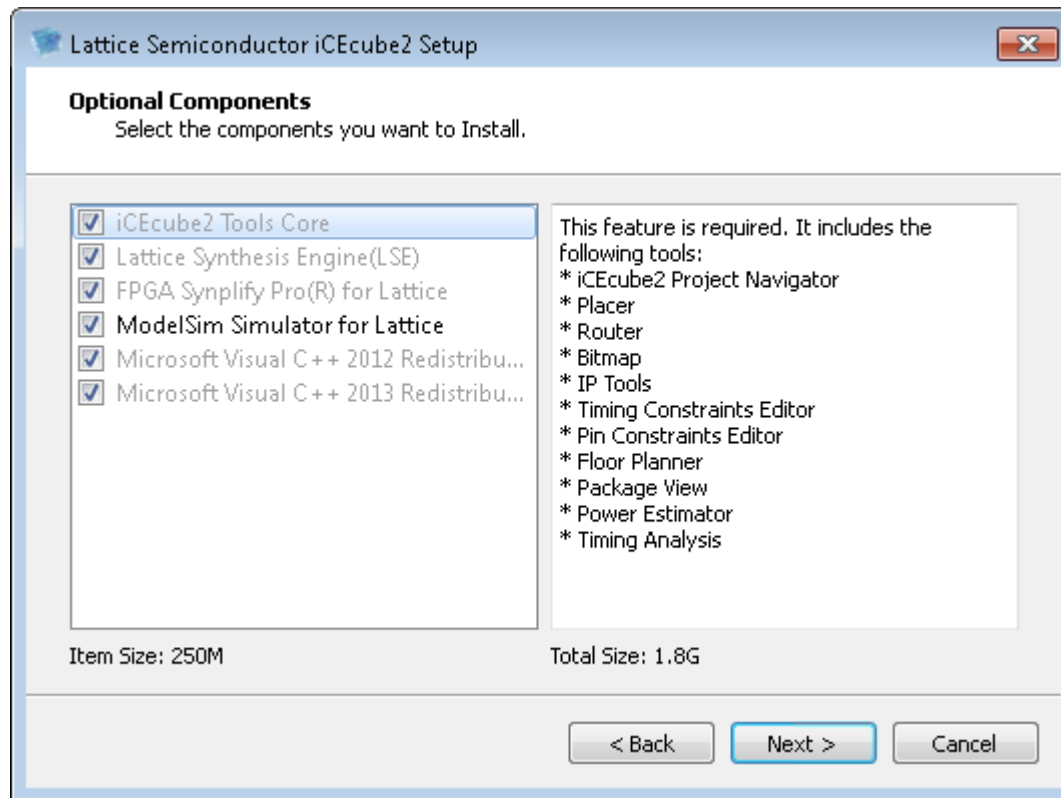


Specify iCEcube2 license by either:

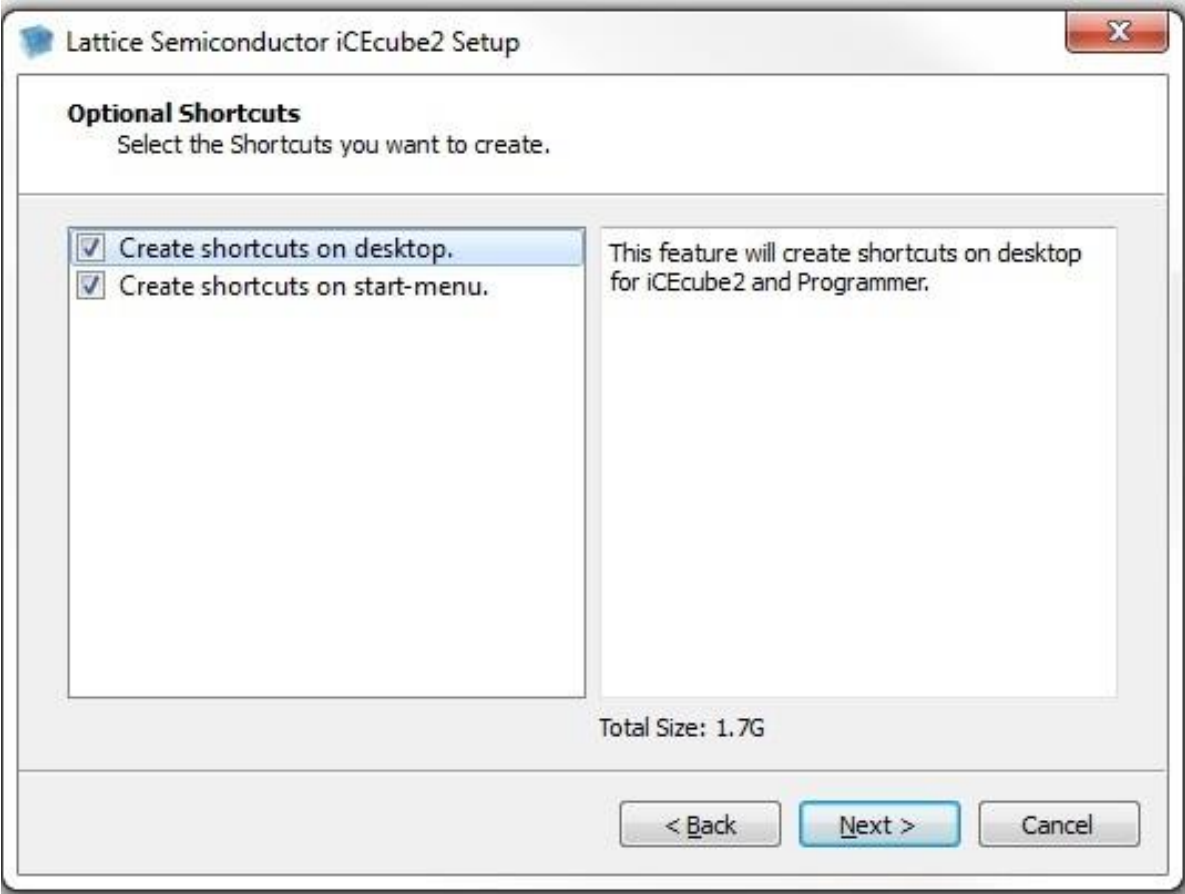
- Browsing to locate a license file on disk
- Typing a floating license server into the text box



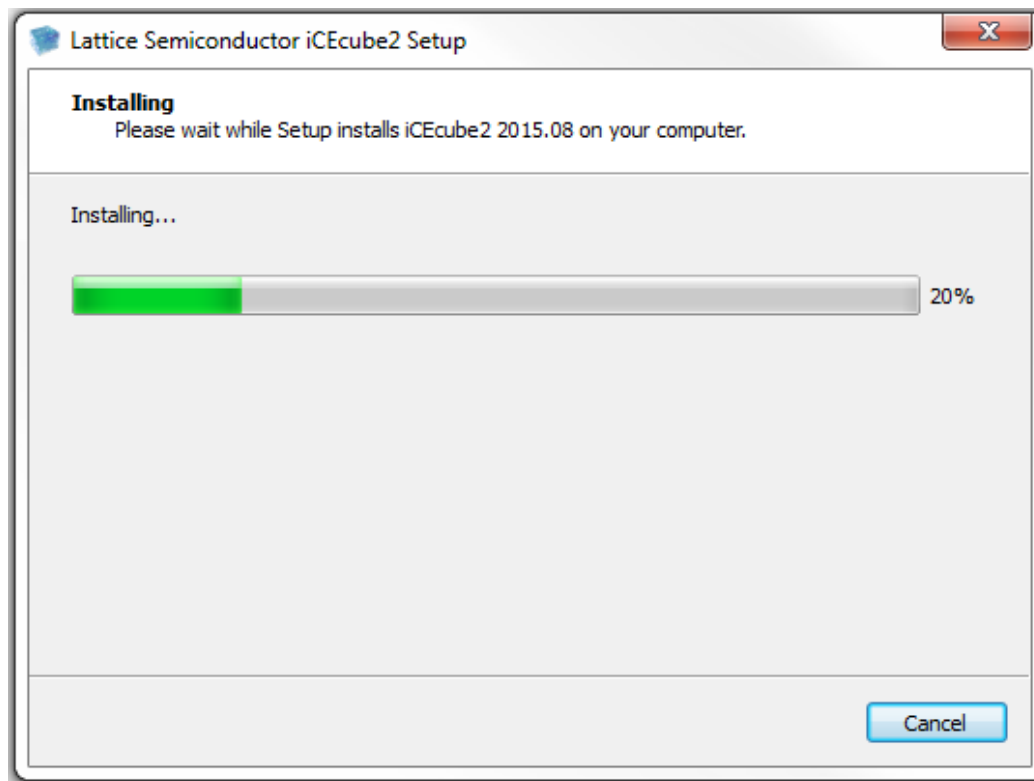
Install the “ModelSim” Windows based Simulation Software for functional and timing verification.



Create shortcuts on desktop and start-menu.

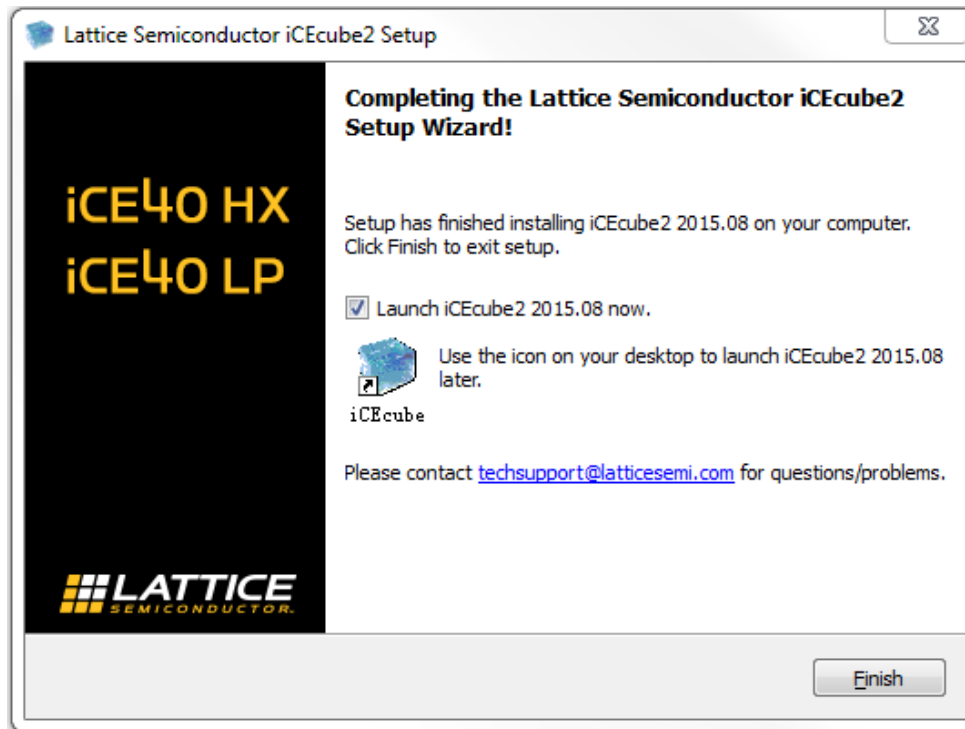


Installer starts to install iCEcube2 on your computer



When the Setup Wizard is finished, click “Finish” to exit and launch iCEcube2.

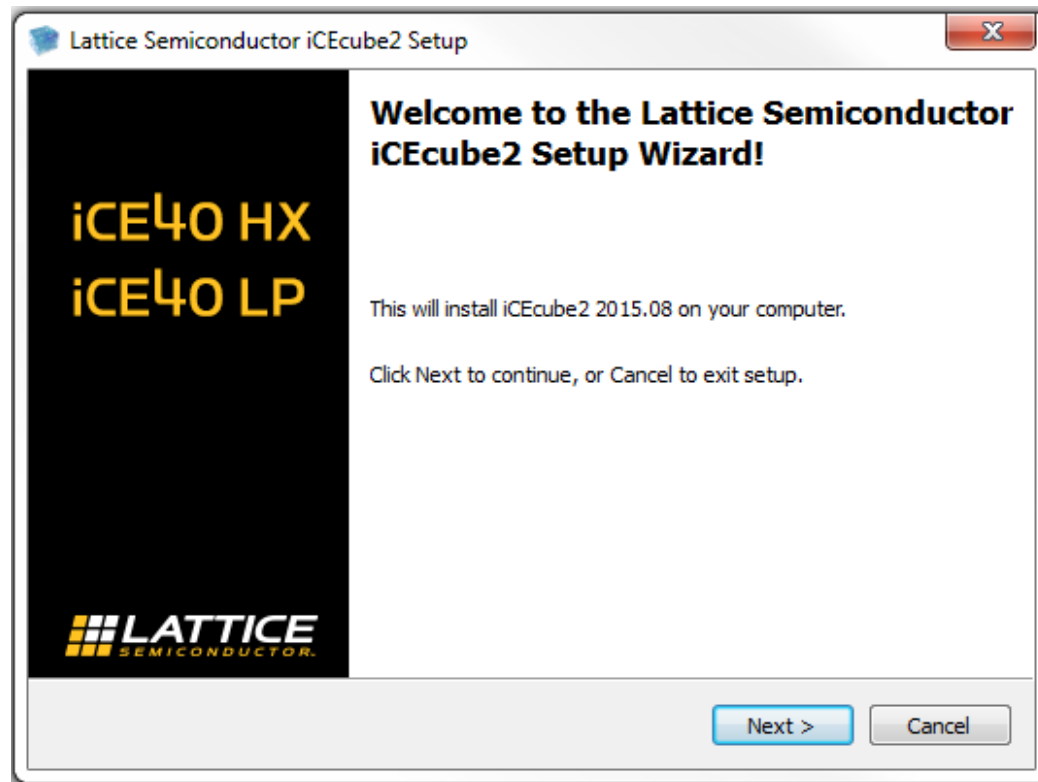
Congratulations!! You have successfully installed iCEcube2.



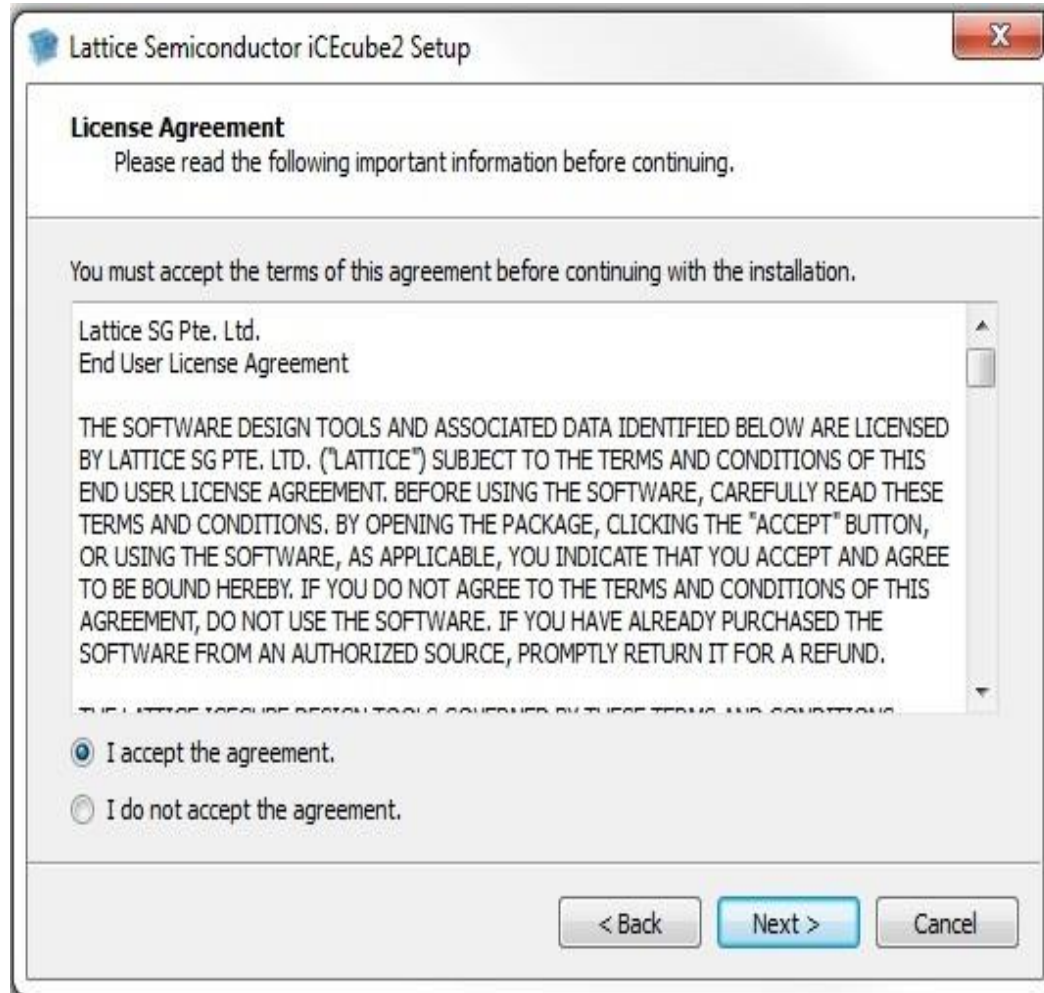
Download the latest iCEcube2 installer for linux from Lattice website.

<http://www.latticesemi.com/products/designsoftware/icecube2/downloads.cfm>

Launch the iCEcube2 linux installer

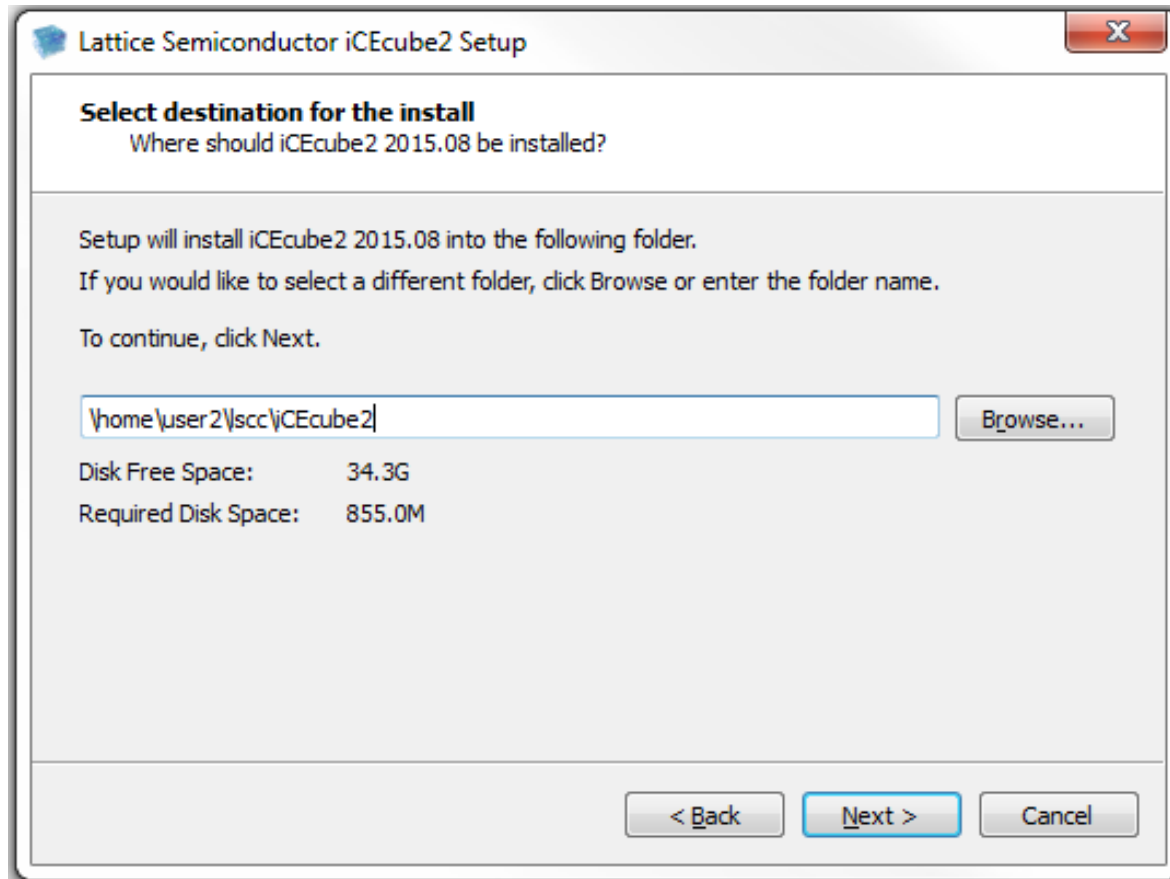


Accept the license agreement



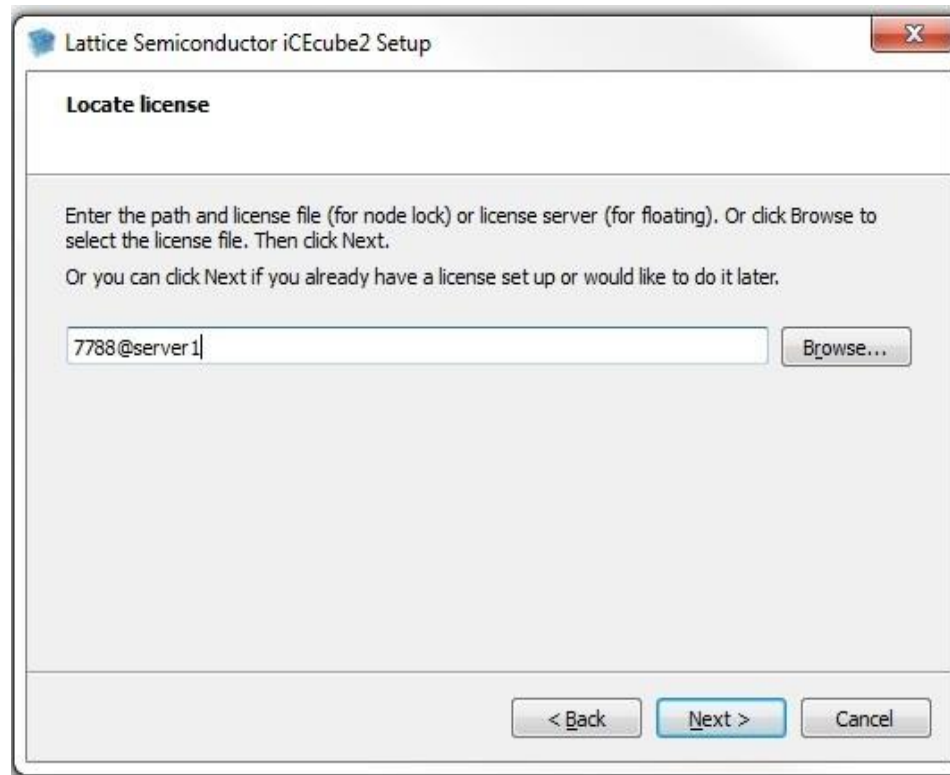
Select the installation directory

- Default location is recommended
- No spaces are allowed

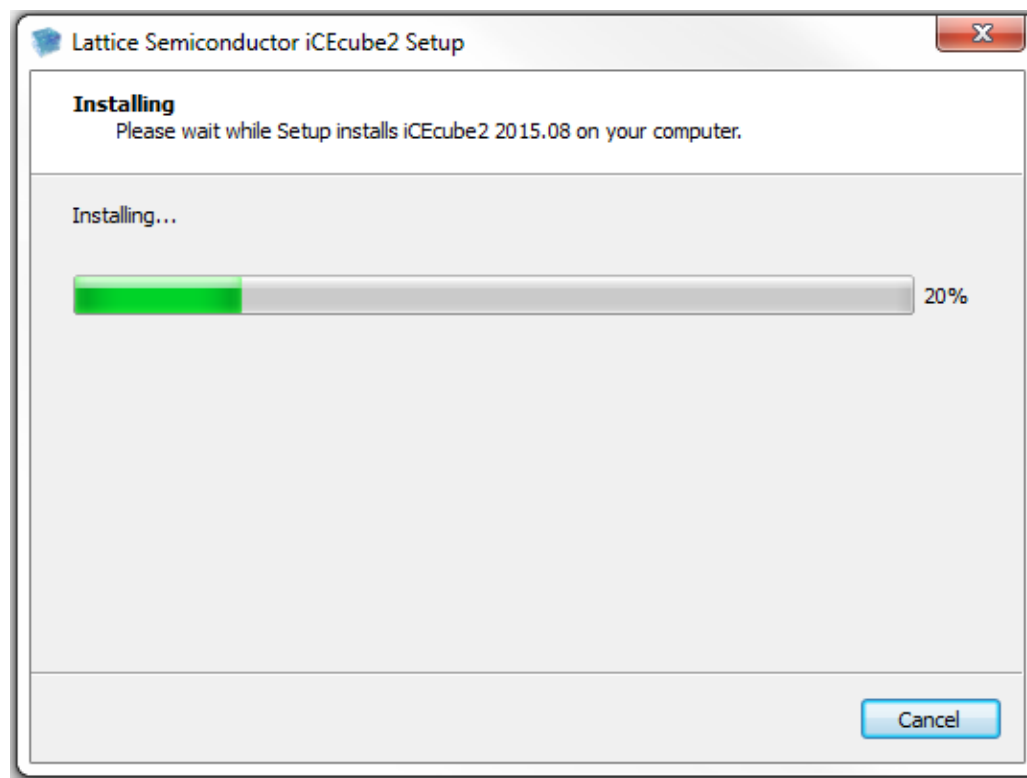


Specify iCEcube2 license by either:

- Browsing to locate a license file on disk
- Typing a floating license server into the text box

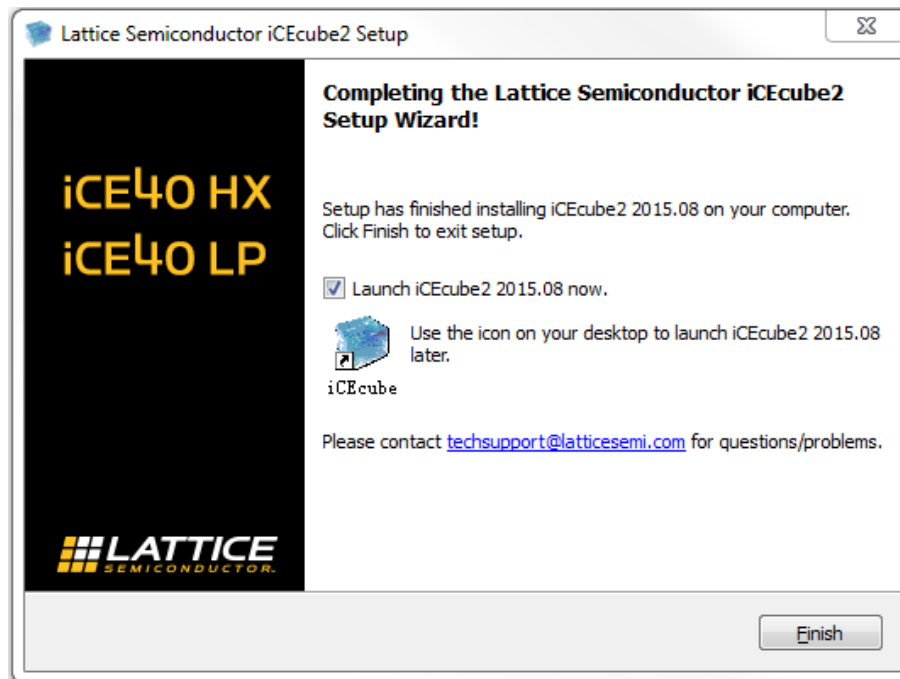


Installer starts to install iCEcube2 on your computer



When the Setup Wizard is finished, click “Finish” to exit and Launch iCEcube2.

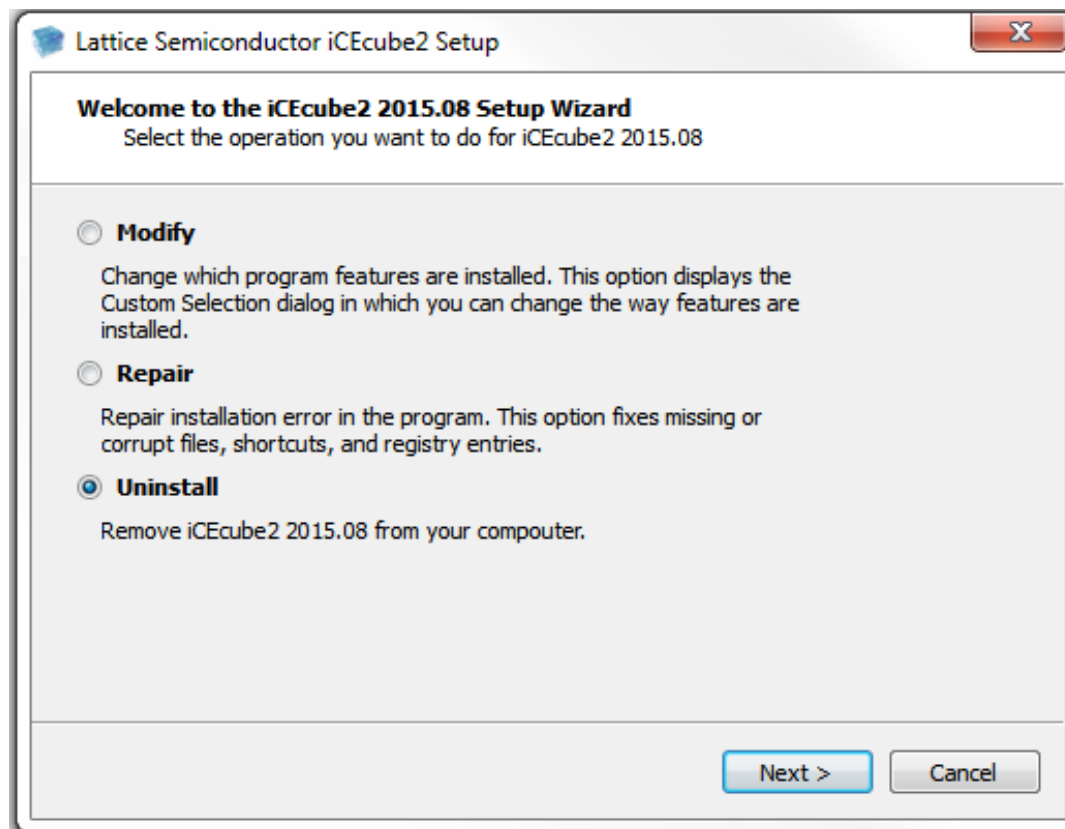
Invoke iCEcube2 from bash shell by “<installation_dir>/iCEcube2 &’



Invoke `<installation_dir>/Setup.exe`

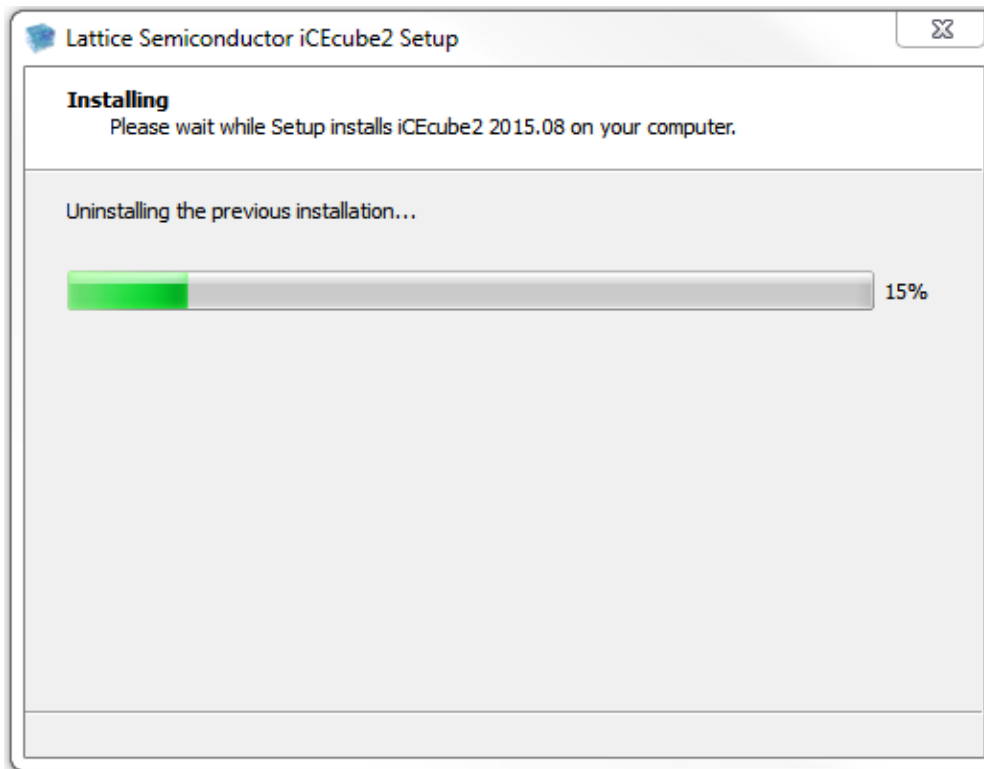
Use Modify option to install the required programming tools for windows.

Now, Select Uninstall option to uninstall the iCEcube2 software

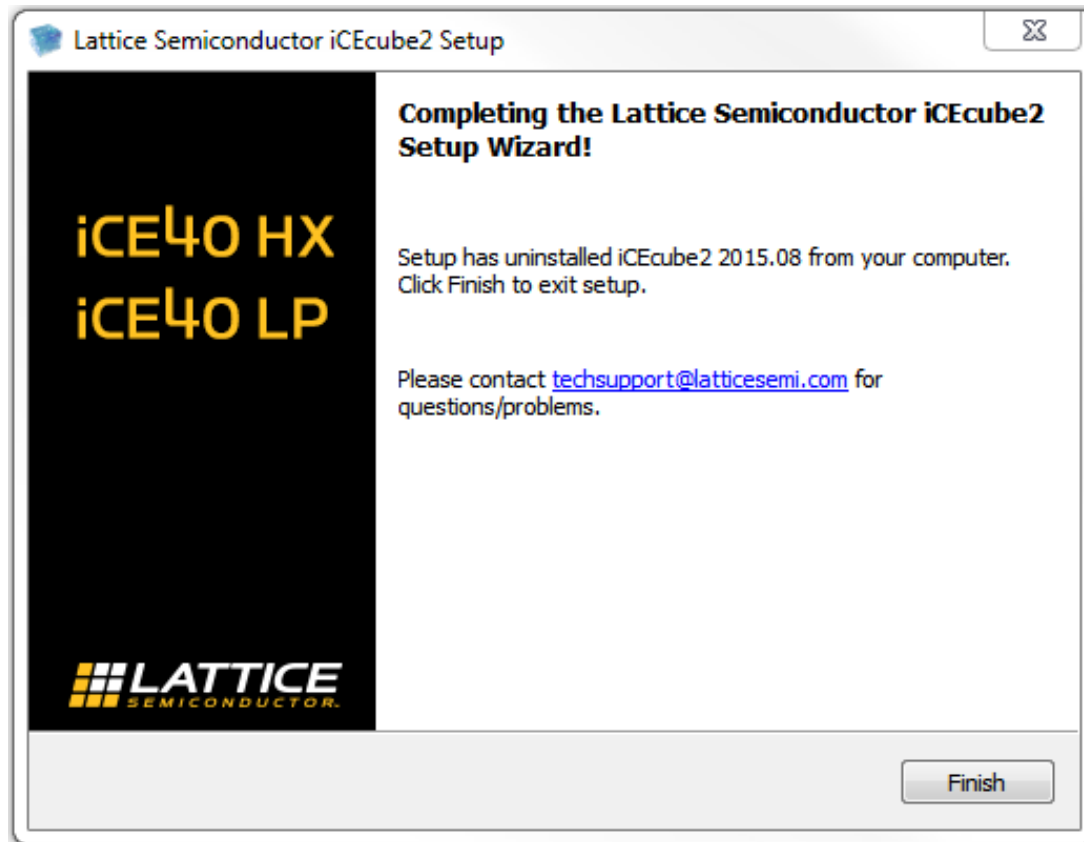


Confirm to uninstall iCEcube2.

Setup wizard starts to uninstall the software from your computer.



Uninstall process completed. Click on “Finish” to exit the setup wizard.



iCEcube2 license management utilities are located at
<instllation_dir>\sbt_backend\bin\win32\opt

- **Imgrd.exe** : License server program.
- **Imutil.exe** : FLEXlm utility to diagnose ,control license
- **Imtools.exe** : Utility to setup and control floating server
- **ispdsdmn.exe** : The Lattice Semiconductor licensing daemon for windows

Edit the floating license file to specify the server name , port and the paths to the Lattice daemon.

```
SERVER <servername> 0018d1ye3037 <portnumber>  
DAEMON lattice <instllation_dir>\sbt_backend\bin\win32\opt\ispdsdmn.exe
```

```
FEATURE LSC_ICECUBE2_A lattice 10.0 11-mar-2014 10 7B847C77C779 \  
VENDOR_STRING="LSC_ICECUBE2_A "
```

```
FEATURE LSC_ADVANCED lattice 8.0 11-mar-2014 10 FF474427C07C \  
VENDOR_STRING="ispLEVER Advanced "
```

.....

Start license server using the Imgrd/Imtools program.

Each client PC must have the LM_LICENSE_FILE variable set to point to the license server.

iCEcube2 license management utilities are located at
<instllation_dir>/sbt_backend/bin/linux/opt

- **Imgrd.exe** : License server program.
- **Imutil.exe** : FLEXlm utility to diagnose ,control license.
- **lattice** : The Lattice Semiconductor licensing daemon for linux

Edit the floating license file to specify the server name , port and the paths to the Lattice daemon.

```
SERVER <servername> 0018d1ye3037 <portnumber>
DAEMON lattice <instllation_dir>/sbt_backend/bin/linux/opt/lattice

FEATURE LSC_ICECUBE2_A lattice 10.0 11-mar-2014 10 7B847C77C779 \
  VENDOR_STRING="LSC_ICECUBE2_A "

FEATURE LSC_ADVANCED lattice 8.0 11-mar-2014 10 FF474427C07C \
  VENDOR_STRING="ispLEVER Advanced "
```

.....
Start license server using the Imgrd utility.

Each client PC must have the LM_LICENSE_FILE variable set to point to the license server.

Verify that the required network adapter is present

- Inspect the license file, and make note of the HOSTID string (e.g. HOSTID=000C2965945E)
- Windows
 - Launch “cmd” console, type “ipconfig –all”
- Linux
 - Type “ifconfig –a”
- Verify that one of the network adapters listed has a physical address that matches HOSTID.
- If Virtual Machine (e.g. Remote Desktop) is used, the HOSTID should match with the MAC address of that Virtual Machine.

Make sure LM_LICENSE_FILE environment variable points to the license.dat file.

Re-run the iCEcube2 license setup wizard

- Navigate to the iCEcube2 installation directory
- Launch “LicenseSetup.exe” and re-enter the license path and file name

There is a bug in the current installer that occurs only in Windows Vista Home.

- **Skip the workaround for other OS versions**

Implement workaround before installation by turning off user account control (UAC)

Change this option using the control panel

- **Method 1: Control Panel Standard View**
- **Method 2: Control Panel Classic View**

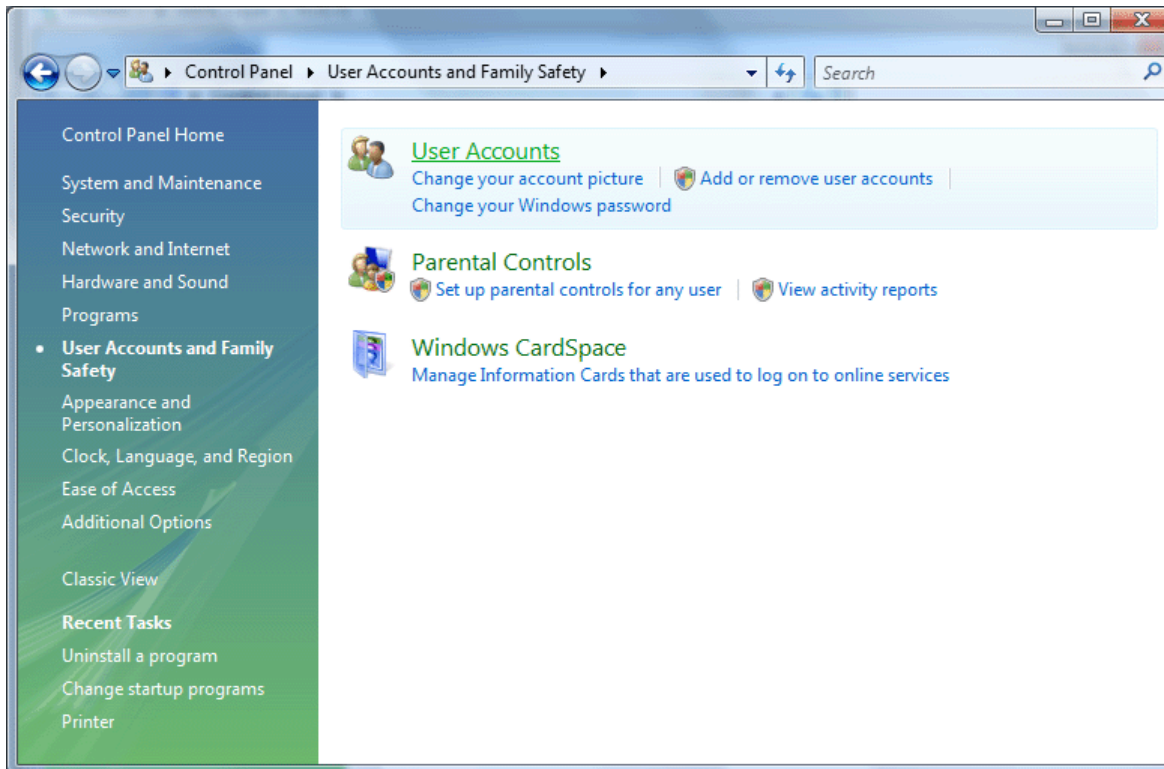
REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

Standard View, step 1 of 4: Click “User Accounts and Family Safety”



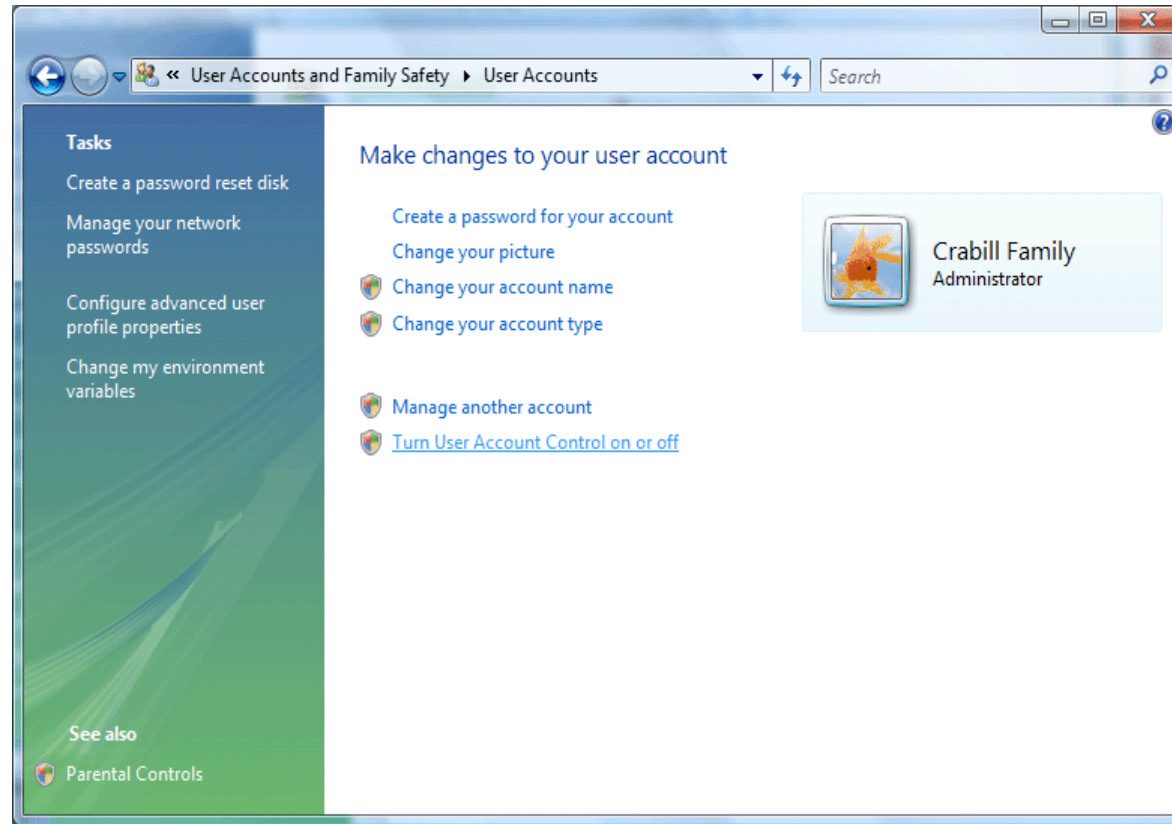
REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

Standard View, step 2 of 4: Click “User Accounts”



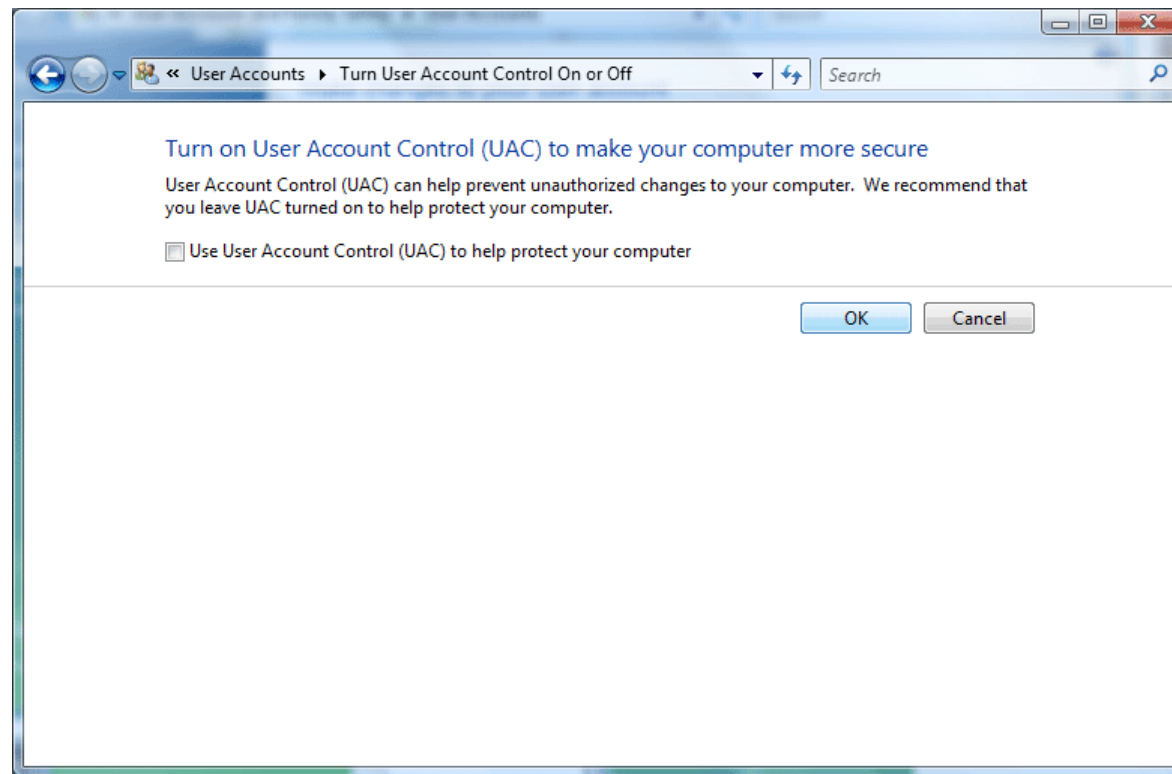
REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

Standard View, step 3 of 4: Click “Turn User Account Control on or off”



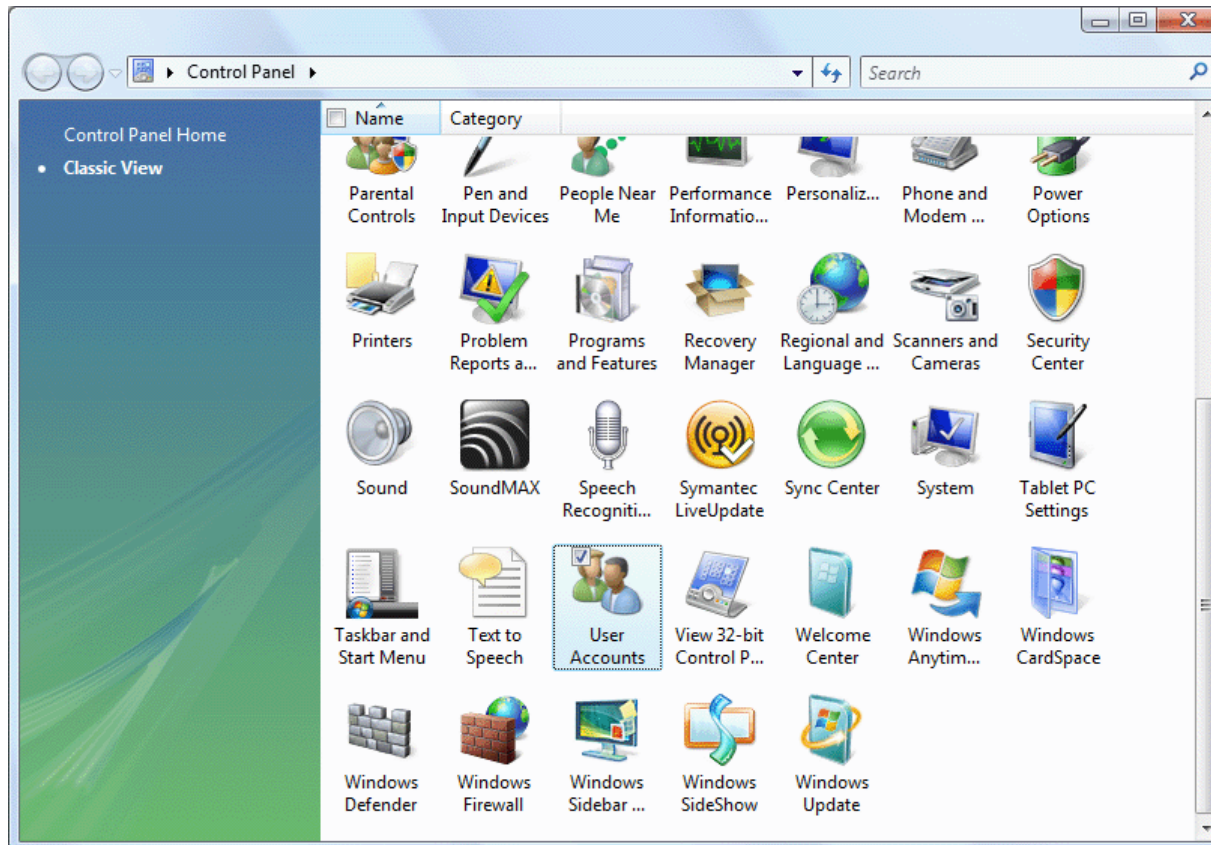
REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

Standard View, step 4 of 4: Uncheck “Use User Account Control” if checked, click OK.



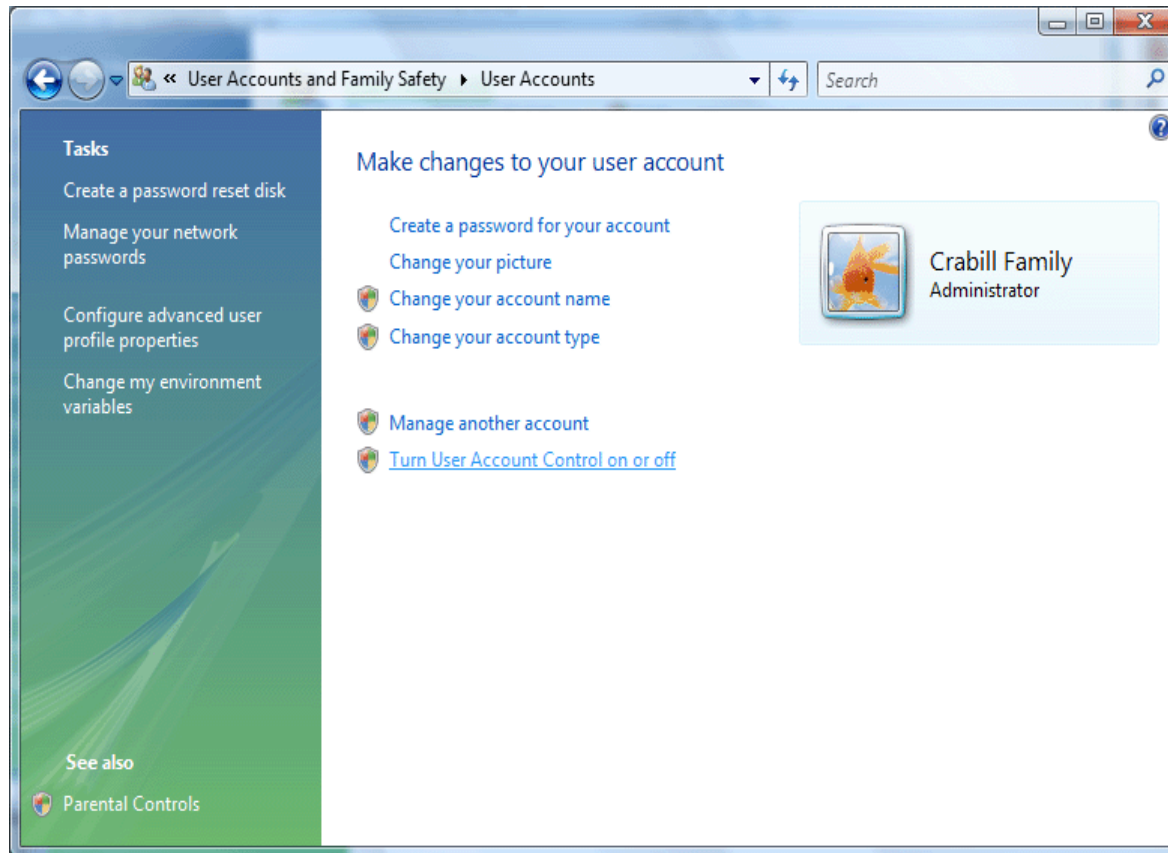
REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

Classic View, step 1 of 3: Click “User Accounts”



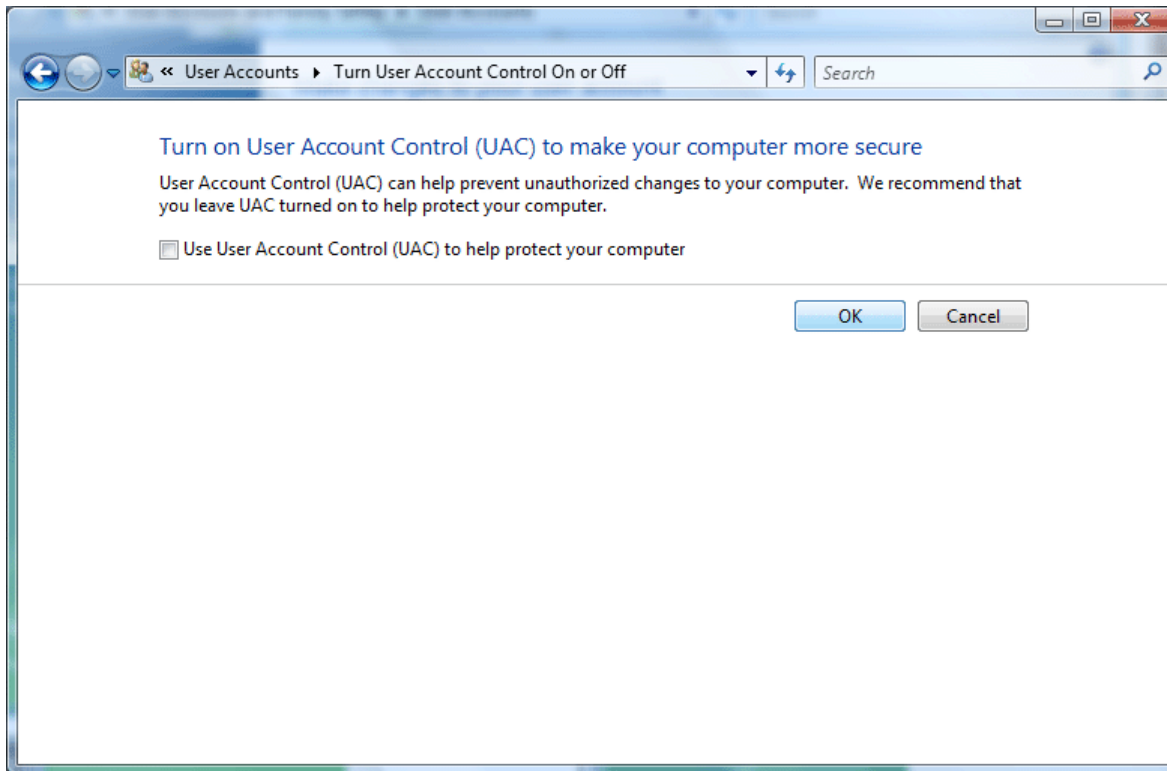
REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

Classic View, step 2 of 3: Click “Turn User Account Control on or off”



REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

Classic View, step 3 of 3: Uncheck “Use User Account Control” if checked, click OK



REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)



Windows Security Center may issue warnings once UAC is turned off. If desired, turn UAC on after installation.