Installing Jenkins as a Windows service

Install Jenkins as a Windows service

NOTE: If you installed Jenkins using the windows installer, you shouldn't need to do anything else here because the windows installer automatically runs Jenkins as a windows service.

First, you need to start Jenkins before installing it. This can be done from JNLP, or by running "java -jar jenkins.war".

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Now connect to Jenkins by going to the following URL http://<hostname>:8080/
Once Jenkins is started this way, look for the "Install as Windows Service" link in the "Manage Jenkins" page (requires Microsoft .NET framework version 2.0):

NOTE: The "Install as Windows Service" link indicated above will not appear if Jenkins is already running as a service on the machine. You can verifying that Jenkins is running as a service by launching the Services app from the Windows Start Menu and looking for a running service called "jenkins" among the list of all windows services running on the machine.
Clicking this link shows you the installation screen:

Choose the directory where Jenkins shall be installed (directory must already exist. If not create it before hand). This will become JENKINS_HOME and used to store data files and programs alike.

Upon successful completion of the installation, you should see a page asking you to restart Jenkins.
This is to re-launch Jenkins as a newly installed Windows service. When you click yes, you'll be asked to wait until the restart completes:

At this point you can use the service manager to confirm that Jenkins is running as a service.

If a restart fails for some reason, check the output from Jenkins, which is stored in the installation directory that you specified.

For W2K8 R2 users you may need to add `C:\Windows\SysWOW64` to the PATH env var.

Install Slave as a Windows service (require .NET 2.0 framework)

Jenkins also allows you to install a slave agent as a Windows service. (See Distributed builds for more about how to do distribute builds in general.)
First, you configure your slave to run as a JNLP slave agent. This should create a JNLP launch icon in the corresponding page, as shown below:

From the slave machine, launch a slave agent. You should see a window like this:

Projects tied on a

None
Choose "File" > "Install as Windows Service" from the menu:

Confirm your intention to install as a service. The installation will place the program files to the directory designated as the slave root directory (from the "configure executors" screen.)

Once the installation succeeds, you'll be asked if you'd like to stop the current slave agent and immediately start a slave agent.

When you click "OK", the slave agent window will terminate. The new slave agent runs as a service without showing a window, so head over to the service manager from the control panel and confirm that the slave agent is indeed running as a service:

If the slave is supposed to start desktop applications you have to allow the service to interact with the desktop (Action->Properties->Logon->Allow service to interact with desktop).

Configure Slave Service to Run as Domain User (Windows Server 2008 R2 x64)
Warning: Hudson may reset this setting if it deploys a new Slave at any time.

On Windows Server 2008 R2 x64 to configure the service Jenkins to run as the desired domain user.

On the Jenkins install directory, grant All Privileges to the Jenkins domain user. You may have to delete all old LOG files, hudson-slave.err, hudson-slave.out, hudson-slave.wrapper and redirect for the service to start back up.

Grant read access to the Jenkins user on the following registry key:

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\SecurePipeServers\winreg
```

Start the service back up and you should be able to run jobs as the domain user.

Install Slave as a Windows service (cmd version)

In a cmd execute the following command:

```
sc.exe create "<serviceKey>" start= auto binPath= "<path to jenkins-slave.exe>" DisplayName= "<service display name>"
```

<serviceKey> is the name of the registry key that will define the service (this will not be displayed)
<service display name> is the label that will identify the service in the service manager interface

Note that one space after the "=" for each option is mandatory.
Also note that this will not assign a description string to the service. This can be added by creating a new String value called Description in the registry, under

```
Computer\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\<serviceKey>
```

See the sc.exe reference for information on sc.exe

See also How To Create a User-Defined Service if you want to manually customize your service attributes.

You can also use instsrv instead of sc.exe:

1. Run path\instsrv "Jenkins Slave" path\instsrvany.exe
2. Run regedit
3. Create HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Jenkins Slave\Parameters
4. Add the following registry keys:
   a. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Jenkins Slave\Description="Jenkins Continuous Integration Slave"
   b. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Jenkins Slave\Parameters\AppParameters="-jar path\slave.jar -jnlpUrl http://jenkins-master:8080/computer/jenkins-slave/slave-agent.jnlp"
   c. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Jenkins Slave\Parameters\Application="C:\WINDOWS\system32\java.exe"

Launch Java Web Start slave agent via Windows Scheduler

If you are having trouble getting the Java Web Start agent installed as a Windows service an alternative method of starting the service automatically when Windows starts is to use the Windows Scheduler.

Changing the configuration of services

The JVM launch parameters of these Windows services are controlled by an XML file jenkins.xml and jenkins-slave.xml respectively. These files can be found in $JENKINS_HOME and in the slave root directory respectively, after you've install them as Windows services.

The file format should be self-explanatory. Tweak the arguments for example to give JVM a bigger memory.

Stdout and stderr from the service processes go to log files in the same directory.

Uninstallation

To uninstall the jenkins slave service, run jenkins-slave.exe uninstall from the command line.

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Troubleshooting

If the slave service doesn't start as intended, check the following locations for more information.

- Look at the Windows event viewer under the application section for the logging output from Jenkins. This captures the key Windows service events, such as startup and termination.
- Look at the log files in the directory that jenkins.exe resides. They correspond to the standard output and the standard error from the slave process, and often Java stack traces are sent there.