

# Windows slaves fail to start via DCOM

If you chose "Let Hudson control this Windows slave as a Windows service" for connecting to slave, you may get an error message like this: "WindowsWindows" :

```
Access is denied. [0x00000005]
  at org.jinterop.dcom.core.JIComServer.init(JIComServer.java:542)
  at org.jinterop.dcom.core.JIComServer.initialise(JIComServer.java:458)
  at org.jinterop.dcom.core.JIComServer.<init>(JIComServer.java:427)
  at org.jvnet.hudson.wmi.WMI.connect(WMI.java:41)
  at hudson.os.windows.ManagedWindowsServiceLauncher.launch(ManagedWindowsServiceLauncher.java:107)
  at hudson.slaves.SlaveComputer$1.call(SlaveComputer.java:170)
  at java.util.concurrent.FutureTask$Sync.innerRun(FutureTask.java:303)
  at java.util.concurrent.FutureTask.run(FutureTask.java:138)
  at java.util.concurrent.ThreadPoolExecutor$Worker.runTask(ThreadPoolExecutor.java:886)
  at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:908)
  at java.lang.Thread.run(Thread.java:619)
Caused by: rpc.FaultException: Received fault. (unknown)
  at rpc.ConnectionOrientedEndpoint.call(ConnectionOrientedEndpoint.java:142)
  at rpc.Stub.call(Stub.java:112)
  at org.jinterop.dcom.core.JIComServer.init(JIComServer.java:538)
  ... 10 more
```

If so, check the following settings on Windows:  
Windows:

## Local "Administrator" group membership / "Administrator"

Make sure that the user name you have entered is a member of the local "Administrators" group. In the default Windows installation, this group membership is required for Hudson to remotely copy files and install a service.  
"WindowsWindows"Administrator"WindowsHudson

## Firewall /

By default, Windows Firewall prevents the TCP connections necessary to make this mechanism work. The firewall on the slave must allow the following exceptions (see [List of TCP&UDP port numbers](#)):

WindowsDCOMTCP

([List of TCP&UDP port numbers](#)):

- TCP Port [135](#) (DCE/RPC Locator service)
- TCP Port [139](#) (NetBIOS Session Service)
- TCP Port [445](#) (Windows shares / Windows)
  
- C:\WINDOWS\system32\dllhost.exe (dllhost.exe seems to use a random port number / dllhost.exe )
- C:\WINDOWS\system32\javaw.exe (Hudson also uses a random port number / Hudson)
- File and Printer sharing (TCP 139, TCP 445, UDP 137, UDP 138 (possibly only a subset of these is required))
- (TCP 139, TCP 445, UDP 137, UDP 138 ())

The easiest way to track down firewall issues is to use [tcpdump](#). Just run the following command on the Hudson server, which is trying to connect to the slave:

[tcpdump](#)Hudson:

Linux/UNIX:

```
tcpdump -n -i <IF> -s 1500 port not 22 and host <HOST-IP>

<IF>          the network interface name, e.g. eth1 / (NIC) (e.g. eth1)
<HOST-IP>    the IP address of the slave / IP
```

## Ports 139 and 445 / 139, 445

When the Ports 139 (NetBIOS Session Service) and 445 (Windows Shares) are not available, the following error message appears:  
139 (NetBIOS ) 445 (Windows) :

```


ERROR: Message not found for errorCode: 0xC0000001
org.jinterop.dcom.common.JIException: Message not found for errorCode: 0xC0000001
  at org.jinterop.winreg.smb.JIWinRegStub.winreg_OpenHKCR(JIWinRegStub.java:121)
  at org.jinterop.dcom.core.JIComServer.initialise(JIComServer.java:479)
  at org.jinterop.dcom.core.JIComServer.<init>(JIComServer.java:427)
  at org.jvnet.hudson.wmi.WMI.connect(WMI.java:41)
  at hudson.os.windows.ManagedWindowsServiceLauncher.launch(ManagedWindowsServiceLauncher.java:137)
  at hudson.slaves.SlaveComputer$1.call(SlaveComputer.java:184)
  at java.util.concurrent.FutureTask$Sync.innerRun(FutureTask.java:303)
  at java.util.concurrent.FutureTask.run(FutureTask.java:138)
  at java.util.concurrent.ThreadPoolExecutor$Worker.runTask(ThreadPoolExecutor.java:886)
  at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:908)
  at java.lang.Thread.run(Thread.java:619)
Caused by: jcifs.smb.SmbException:
Connection timeout jcifs.util.transport.TransportException: Connection timeout
  at jcifs.util.transport.Transport.connect(Transport.java:178)
  at jcifs.smb.SmbTransport.connect(SmbTransport.java:294)
  at jcifs.smb.SmbTree.treeConnect(SmbTree.java:141)
  at jcifs.smb.SmbFile.doConnect(SmbFile.java:858)
  at jcifs.smb.SmbFile.connect(SmbFile.java:901)
  at jcifs.smb.SmbFile.connect0(SmbFile.java:827)
  at jcifs.smb.SmbFileInputStream.<init>(SmbFileInputStream.java:76)
  at jcifs.smb.SmbFileInputStream.<init>(SmbFileInputStream.java:65)
  at jcifs.smb.SmbFile.getInputStream(SmbFile.java:2784)
  at rpc.ncacn_np.RpcTransport.attach(RpcTransport.java:90)
  at rpc.Stub.attach(Stub.java:105)
  at rpc.Stub.call(Stub.java:109)
  at org.jinterop.winreg.smb.JIWinRegStub.winreg_OpenHKCR(JIWinRegStub.java:119)
  at org.jinterop.dcom.core.JIComServer.initialise(JIComServer.java:479)
  at org.jinterop.dcom.core.JIComServer.<init>(JIComServer.java:427)
  at org.jvnet.hudson.wmi.WMI.connect(WMI.java:41)
  at hudson.os.windows.ManagedWindowsServiceLauncher.launch(ManagedWindowsServiceLauncher.java:137)
  at hudson.slaves.SlaveComputer$1.call(SlaveComputer.java:184)
  at java.util.concurrent.FutureTask$Sync.innerRun(FutureTask.java:303)
  at java.util.concurrent.FutureTask.run(FutureTask.java:138)
  at java.util.concurrent.ThreadPoolExecutor$Worker.runTask(ThreadPoolExecutor.java:886)
  at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:908)
  at java.lang.Thread.run(Thread.java:619)
  at jcifs.smb.SmbTransport.connect(SmbTransport.java:296)
  at jcifs.smb.SmbTree.treeConnect(SmbTree.java:141)
  at jcifs.smb.SmbFile.doConnect(SmbFile.java:858)
  at jcifs.smb.SmbFile.connect(SmbFile.java:901)
  at jcifs.smb.SmbFile.connect0(SmbFile.java:827)
  at jcifs.smb.SmbFileInputStream.<init>(SmbFileInputStream.java:76)
  at jcifs.smb.SmbFileInputStream.<init>(SmbFileInputStream.java:65)
  at jcifs.smb.SmbFile.getInputStream(SmbFile.java:2784)
  at rpc.ncacn_np.RpcTransport.attach(RpcTransport.java:90)
  at rpc.Stub.attach(Stub.java:105)
  at rpc.Stub.call(Stub.java:109)
  at org.jinterop.winreg.smb.JIWinRegStub.winreg_OpenHKCR(JIWinRegStub.java:119)
  ... 10 more

```

## Local Security Settings /

1. Start the control panel, go to "Administrative Tools", then "Local Security Policy". This will open up the "local security settings" window
2. """"""

1. Go to "Local Policies" > "Security Options" > "Network access: Sharing and security model for local accounts." Change that to "Classic."
2. "" > "" > ". " ""

 This only applies to Windows computers that are not a part of a domain ([reference](#))

 ()

## Remote Registry Service/

The Remote Registry service must be running in order to install the Jenkins service, but it may be stopped on your computer. This is especially true for Windows Vista, where it is disabled by default. If it is not running, you may get an error like this:  
JenkinsWindows Vista ():

```
Message not found for errorCode: 0xC0000034
org.jinterop.dcom.common.JIException: Message not found for errorCode: 0xC0000034
  at org.jinterop.winreg.smb.JIWinRegStub.winreg_OpenHKCR(JIWinRegStub.java:121)
  at org.jinterop.dcom.core.JIComServer.initialise(JIComServer.java:479)
  at org.jinterop.dcom.core.JIComServer.<init>(JIComServer.java:427)
  at org.jvnet.hudson.wmi.WMI.connect(WMI.java:41)
  at hudson.os.windows.ManagedWindowsServiceLauncher.launch(ManagedWindowsServiceLauncher.java:107)
  at hudson.slaves.SlaveComputer$1.call(SlaveComputer.java:178)
  at java.util.concurrent.FutureTask$Sync.innerRun(FutureTask.java:334)
  at java.util.concurrent.FutureTask.run(FutureTask.java:166)
  at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1110)
  at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:603)
  at java.lang.Thread.run(Thread.java:636)
Caused by: jcifs.smb.SmbException: The system cannot find the file specified.
  at jcifs.smb.SmbTransport.checkStatus(SmbTransport.java:542)
  at jcifs.smb.SmbTransport.send(SmbTransport.java:644)
  at jcifs.smb.SmbSession.send(SmbSession.java:242)
  at jcifs.smb.SmbTree.send(SmbTree.java:111)
  at jcifs.smb.SmbFile.send(SmbFile.java:729)
  at jcifs.smb.SmbFile.open0(SmbFile.java:934)
  at jcifs.smb.SmbFile.open(SmbFile.java:951)
  at jcifs.smb.SmbFileOutputStream.<init>(SmbFileOutputStream.java:142)
  at jcifs.smb.TransactNamedPipeOutputStream.<init>(TransactNamedPipeOutputStream.java:32)
  at jcifs.smb.SmbNamedPipe.getNamedPipeOutputStream(SmbNamedPipe.java:187)
  at rpc.ncacn_np.RpcTransport.attach(RpcTransport.java:91)
  at rpc.Stub.attach(Stub.java:105)
  at rpc.Stub.call(Stub.java:109)
  at org.jinterop.winreg.smb.JIWinRegStub.winreg_OpenHKCR(JIWinRegStub.java:119)
  ... 10 more
```

If so, start the control panel, open "Administrative Tools," then "Services." Locate the Remote Registry service on the list, and click "Start this service."

## Remote Registry Permissions /

If the Remote Registry user don't have access to the registry key that configures remote registry path access you should see this error:  
:

Access is denied. See  
<http://wiki.jenkins-ci.org/display/HUDSON/Windows+slaves+fail+to+start+via+DCOM>  
for more information about how to resolve this.

org.jinterop.dcom.common.JIException: Access is denied, please check whether the [domain-username-password] are correct. Also, if not already done please check the GETTING STARTED and FAQ sections in readme.htm. They provide information on how to correctly configure the Windows machine for DCOM access, so as to avoid such exceptions. [0x00000005]

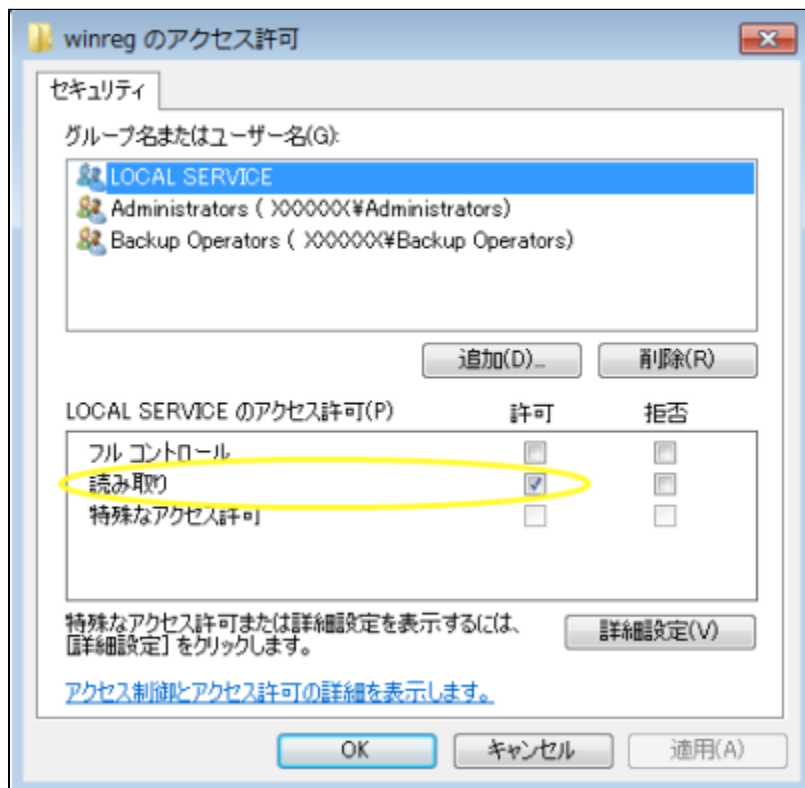
```
at org.jinterop.winreg.smb.JIWinRegStub.winreg_CreateKey(JIWinRegStub.java:297)
at org.jinterop.dcom.core.JIComServer.initialise(JIComServer.java:480)
at org.jinterop.dcom.core.JIComServer.<init>(JIComServer.java:427)
at org.jvnet.hudson.wmi.WMI.connect(WMI.java:41)
at hudson.os.windows.ManagedWindowsServiceLauncher.launch(ManagedWindowsServiceLauncher.java:107)
at hudson.slaves.SlaveComputer$1.call(SlaveComputer.java:178)
at java.util.concurrent.FutureTask$Sync.innerRun(Unknown Source)
at java.util.concurrent.FutureTask.run(Unknown Source)
at java.util.concurrent.ThreadPoolExecutor$Worker.runTask(Unknown Source)
at java.util.concurrent.ThreadPoolExecutor$Worker.run(Unknown Source)
at java.lang.Thread.run(Unknown Source)
```

Caused by: org.jinterop.dcom.common.JIRuntimeException: Access is denied, please check whether the [domain-username-password] are correct. Also, if not already done please check the GETTING STARTED and FAQ sections in readme.htm. They provide information on how to correctly configure the Windows machine for DCOM access, so as to avoid such exceptions. [0x00000005]

```
at org.jinterop.winreg.IJIWinReg$createKey.read(IJIWinReg.java:459)
at ndr.NdrObject.decode(NdrObject.java:19)
at rpc.ConnectionOrientedEndpoint.call(ConnectionOrientedEndpoint.java:138)
at rpc.Stub.call(Stub.java:112)
at org.jinterop.winreg.smb.JIWinRegStub.winreg_CreateKey(JIWinRegStub.java:291)
... 10 more
```

In the slave use regedit to ensure that the user that is running the 'Remote Registry' service, usually 'LOCAL SERVICE', has READ access to these entries:  
" Jenkins 'LOCAL SERVICE' Jenkins 'LOCAL SERVICE'

HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control\SecurePipeServers\winreg



## .NET Framework

On Windows XP / 2003, if you see a message like this:  
Windows XP / 2003.NET framework 3.5SP1

```
Installing the Hudson slave service
No more data is available. [0x00000103]
org.jinterop.dcom.common.JIException: No more data is available. [0x00000103]
    at org.jinterop.winreg.smb.JIWinRegStub.winreg_EnumKey(JIWinRegStub.java:390)
    at hudson.util.jna.DotNet.isInstalled(DotNet.java:81)
    at hudson.os.windows.ManagedWindowsServiceLauncher.launch(ManagedWindowsServiceLauncher.java:117)
    at hudson.slaves.SlaveComputer$1.call(SlaveComputer.java:180)
    at java.util.concurrent.FutureTask$Sync.innerRun(FutureTask.java:334)
    at java.util.concurrent.FutureTask.run(FutureTask.java:166)
    at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1110)
    at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:603)
    at java.lang.Thread.run(Thread.java:636)
Caused by: org.jinterop.dcom.common.JIRuntimeException: No more data is available. [0x00000103]
    at org.jinterop.winreg.IJIWinReg$enumKey.read(IJIWinReg.java:762)
    at ndr.NdrObject.decode(NdrObject.java:19)
    at rpc.ConnectionOrientedEndpoint.call(ConnectionOrientedEndpoint.java:138)
    at rpc.Stub.call(Stub.java:112)
    at org.jinterop.winreg.smb.JIWinRegStub.winreg_EnumKey(JIWinRegStub.java:386)
    ... 8 more
```

Then try upgrading .NET framework to ver 3.5SP1.

Taken from <http://n4.nabble.com/exception-when-winxp-slaves-launch-No-more-data-is-available-0x00000103-td386006.html>  
<http://n4.nabble.com/exception-when-winxp-slaves-launch-No-more-data-is-available-0x00000103-td386006.html>

### If all else fails... / ....

Please file an issue about the problem with the stack trace, with information like Windows versions, so that we can take a look.  
Windows