

# Monitor and Restart Offline Slaves

This script can monitor and restart offline nodes if they are not disconnected manually.

Of course you can disable email notification. Thanks author for [email notification](#).

You can run this script in Jenkins Console. But I think it is good idea to create Jenkins task, which will be run periodically (for example hourly). [Groovy Plugin](#) needs for Jenkins jobs.

Also see [Display Information About Nodes](#)

```
import hudson.model.*
import hudson.node_monitors.*
import hudson.slaves.*
import java.util.concurrent.*

jenkins = Hudson.instance

import javax.mail.internet.*;
import javax.mail.*
import javax.activation.*

def sendMail (slave, cause) {

    message = slave + " slave is down. Check http://JENKINS_HOSTNAME:
JENKINS_PORT/computer/" + slave + "\nBecause " + cause
    subject = slave + " slave is offline"
    toAddress = "JENKINS_ADMIN@YOUR_DOMAIN"
    fromAddress = "JENKINS@YOUR_DOMAIN"
    host = "SMTP_SERVER"
    port = "SMTP_PORT"

    Properties mprops = new Properties();
    mprops.setProperty("mail.transport.protocol","smtp");
    mprops.setProperty("mail.host",host);
    mprops.setProperty("mail.smtp.port",port);

    Session lSession = Session.getDefaultInstance(mprops,null);
    MimeMessage msg = new MimeMessage(lSession);

    //tokenize out the recipients in case they came in as a list
    StringTokenizer tok = new StringTokenizer(toAddress,";");
    ArrayList emailTos = new ArrayList();
    while(tok.hasMoreElements()){
        emailTos.add(new InternetAddress(tok.nextElement().toString()));
    }
    InternetAddress[] to = new InternetAddress[emailTos.size()];
    to = (InternetAddress[]) emailTos.toArray(to);
    msg.setRecipients(MimeMessage.RecipientType.TO,to);
    InternetAddress fromAddr = new InternetAddress(fromAddress);
    msg.setFrom(fromAddr);
    msg.setFrom(new InternetAddress(fromAddress));
    msg.setSubject(subject);
    msg.setText(message)
```

```

Transport transporter = lSession.getTransport("smtp");
transporter.connect();
transporter.send(msg);
}

def getEnviron(computer) {
    def env
    def thread = Thread.start("Getting env from ${computer.name}", { env
= computer.environment })
    thread.join(2000)
    if (thread.isAlive()) thread.interrupt()
    env
}

def slaveAccessible(computer) {
    getEnviron(computer)?.get('PATH') != null
}

def numberOfOfflineNodes = 0
def numberNodes = 0
for (slave in jenkins.slaves) {
    def computer = slave.computer
    numberNodes ++
    println ""
    println "Checking computer ${computer.name}:"
    def isOK = (slaveAccessible(computer) && !computer.offline)
    if (isOK) {
        println "\t\tOK, got PATH back from slave ${computer.name}."
        println('\t\tcomputer.isOffline: ' + slave.getComputer().
isOffline());
        println('\t\tcomputer.isTemporarilyOffline: ' + slave.getComputer().
isTemporarilyOffline());
        println('\t\tcomputer.getOfflineCause: ' + slave.getComputer().
getOfflineCause());
        println('\t\tcomputer.offline: ' + computer.offline);

        } else {
            numberOfOfflineNodes ++
            println " ERROR: can't get PATH from slave ${computer.name}."
            println('\t\tcomputer.isOffline: ' + slave.getComputer().
isOffline());
            println('\t\tcomputer.isTemporarilyOffline: ' + slave.getComputer().
isTemporarilyOffline());
            println('\t\tcomputer.getOfflineCause: ' + slave.getComputer().
getOfflineCause());
            println('\t\tcomputer.offline: ' + computer.offline);
            sendMail(computer.name, slave.getComputer().getOfflineCause().
toString())
            if (slave.getComputer().isTemporarilyOffline()) {
                if (!slave.getComputer().getOfflineCause().toString().contains
("Disconnected by")) {
                    computer.setTemporarilyOffline(false, slave.getComputer().
getOfflineCause())
                }
            }
        }
    }
}

```

```
    }  
  } else {  
    computer.connect(true)  
  }  
}  
}  
println ("Number of Offline Nodes: " + numberOfflineNodes)  
println ("Number of Nodes: " + numberNodes)
```