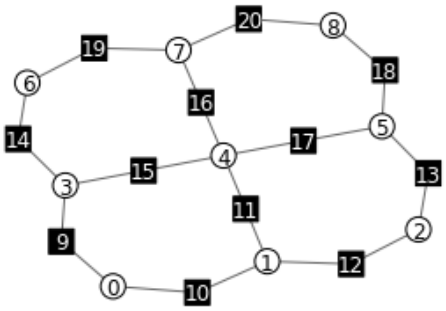
In [2]:
```
import opengm
import vigra
import numpy
import time
import sys
```

In [36]:
```
shape=[3,3]
numLabels=2
unaries=numpy.random.rand(shape[0], shape[1],numLabels)
potts=opengm.PottsFunction([numLabels,numLabels],0.0,0.4)
gm=opengm.grid2d2Order(unaries=unaries,regularizer=potts)
```

In [47]:
```
opengm.visualizeGm(gm=gm)
opengm.visualizeGm(gm=gm,plotUnaries=False)
```

```
get node position...
....done
```


```
get node position...
....done
```



In [50]:
```
#Chain (non-shared functions):
numVar=5
gm=opengm.gm([2]*numVar)
f1=numpy.ones([2])
f2=numpy.ones([2,2])

for vi in xrange(numVar):
    gm.addFactor(gm.addFunction(f1),vi)
    if(vi+1<numVar):
        gm.addFactor(gm.addFunction(f2),[vi,vi+1])
```

In [51]:
```
# visualize gm
opengm.visualizeGm( gm,layout='spring',plotUnaries=False)
```

```
get node position...
....done
```

In [ ]:
```
```