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1  /*
2  MACD BB
3  Developed by David Laffineuse, December 2007
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6  */
7
8  var gUpperBoll = null;
9  var gLowerBoll = null;
10 var gMACD = null;
11 var gTagID = null;
12
13 function preMain() {
14
15     setPriceStudy(false);
16     setStudyTitle("DL_MACD_BB");
17     setCursorLabelName("DL_MACD_UB",0);
18     setCursorLabelName("DL_MACD_LB",1);
19     setDefaultBarFgColor(Color.yellow,0);
20     setDefaultBarFgColor(Color.yellow,1);
21     setPlotType(PLOTTYPE_LINE,0);
22     setPlotType(PLOTTYPE_LINE,1);
23     setDefaultBarThickness(1,0);
24     setDefaultBarThickness(1,1);
25
26     fp1 = new FunctionParameter( "MACD_FL", FunctionParameter.NUMBER);
27     with(fp1) {
28         setName("MACD Fast Length");
29         setDefault(12);
30     }
31     fp2 = new FunctionParameter( "MACD_SL", FunctionParameter.NUMBER);
32     with(fp2) {
33         setName("MACD Slow Length");
34         setDefault(26);
35     }
36     fp3 = new FunctionParameter( "MACD_SM", FunctionParameter.NUMBER);
37     with(fp3) {
38         setName("MACD Smoothing");
39         setDefault(9);
40     }
41     fp4 = new FunctionParameter( "Boll_Length", FunctionParameter.NUMBER);
42     with(fp4) {
43         setName("Bollinger Length");
44         setDefault(20);
45     }
46     fp5 = new FunctionParameter( "Boll_STD", FunctionParameter.NUMBER);
47     with(fp5) {
48         setName("Bollinger Standard Deviation");
49         setDefault(2);
50     }
51 }
52 }
53
54 function main(MACD_FL,MACD_SL,MACD_SM,Boll_Length,Boll_STD){
55
56     var dblMACD = null; // MACD value @ current bar
57     var dblMACD_1 = null; // MACD value @ previous bar
58     var dblUpperBoll = null; // Upper BB value
59     var dblLowerBoll = null; // Lower BB value
60     var strBasisColor = null; // Basis color
61     var strCircleColor = null; // Circle Color
62
63     // Instantiations of studies (done once)
64
65     if (gMACD == null) {
66         gMACD = macd(MACD_FL,MACD_SL,MACD_SM);
67         gUpperBoll = upperBB(Boll_Length,Boll_STD,gMACD);
68         gLowerBoll = lowerBB(Boll_Length,Boll_STD,gMACD);
69     }
70
71     // Rounding required to enable proper white circle assessment
72     dblMACD = Math.round((gMACD.getValue(0))*10000)/10000;
73     dblMACD_1 = Math.round((gMACD.getValue(-1))*10000)/10000;
74     dblUpperBoll = Math.round((gUpperBoll.getValue(0))*10000)/10000;
75     dblLowerBoll = Math.round((gLowerBoll.getValue(0))*10000)/10000;

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76
77 // MACD plot
78 if (dblMACD > dblMACD_1) strCircleColor = "Color.green";
79     else if (dblMACD == dblMACD_1) strCircleColor = "Color.white";
80     else if (dblMACD < dblMACD_1) strCircleColor = "Color.red";
81
82 drawShapeRelative(0, dblMACD, Shape.CIRCLE, null, eval(strCircleColor), Shape.ONTOP );
83
84 // changes the color of the band based on the value of the MACD
85 if (dblMACD >= 0) strBasisColor = "Color.green"; else strBasisColor = "Color.red";
86
87 drawLineRelative(-1,0,0,0, PS_SOLID, 2, eval(strBasisColor),fnGetTagID());
88 addBand(0,PS_SOLID,2,eval(strBasisColor),"0line");
89
90 return new Array (dblUpperBoll,dblLowerBoll);
91
92 }
93 function fnGetTagID() {
94     gTagID += 1;
95     return gTagID;
96 }
```