

# netZOND MANUAL 1.0

## Brief introduction

Netzond applet is designed to show live statistical information gathered from http data-source. It is adopted to perform minimal calculations on client computer, so major note to all netzond users would be - calculate everything you can on the server-side scripts (cgi, php, perl etc...).

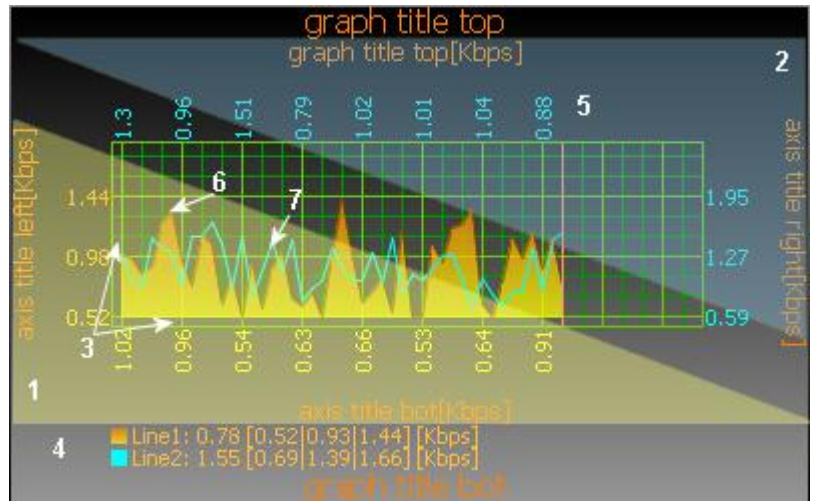
Netzond applet has huge amount of external parameters you can modify. To make applet as small and fast as possible, only minimal parameter validation is performed before processing data, so if you are not experienced web developer or feel lack of attention or accuracy - please use parametrizator supplied in our web page. Before proceeding further - several words about netzond structure:

Applet is divided into South West (left, bottom) and North East (right, top) regions (or axes). Each region can have its own scale, line, color. Moreover - each data-source can have different shape - (line, plot, bar), color, gradient shading, legend value etc. See below for more details.

## 1. Applet structure

1. South West region /SW/ (yellow)
2. North East region /NE/ (blue)
3. Chart inner margins (vertical and horizontal)
4. Legend
5. Axis values (left, right, top, bottom)
6. Example Plot (assigned to SW region)
7. Example Line (assigned to NE region)

applet reads example data from <http://yourserver.com/script.php>, the output consists of two plain text values ("780 1550").



### Notes and restrictions:

- Left and Right axes are linked to SW and NE regions accordingly.
- Top and bottom axes are linked to appropriate regions only if there is one data-source per region (not more than two lines in SW and the same with NE), but you can display any data-source you want on top or bottom axis as well.
- Legend displays information in the following format:
  - Line Label: Current value [min value|average value|max value][Units]
- Applet has one very important parameter - trafficMode. By setting its value from false to true you will force axis and legend values transition from direct counter values (780 octets) to recalculated (0,78Kbit/s). Also, units will be attached to axis and legend values.
- All data-sources attached to appropriate region will have common parameters, such as minimum/maximum axis values, scale multiplier (bits or Kbits etc...).
- You can disable SW or NE region, but not both at once.
- If region is enabled – it must contain at least one data-source.

## 2. Applet parameters

netZond parameters are divided into 9 categories:

1. dataParams - top and bottom scale types, bracket types...
2. SWParams - South West region parameters

3. *NEParams* - North East region parameters
4. *outerParams* - parameters outside chart (fonts, titles, refresh time ...)
5. *innerParams* - parameters inside chart (gridlines, axis styles, legend)
6. *colorParams* - all the colors (RGB) used in the applet
7. *objcolsParams* - color assignment to applet objects
8. *swString* – configuration of lines displayed in SW region
9. *neString* – configuration of lines displayed in NE region

Parameters are entered in the following form:

```
<param name="param1" value="1,2,test,info;2,3,reload,show">
```

If category has subcategories (only *colorParams*, *swString* and *neString*), they are separated with semicolon (;) otherwise values are separated with comma (,). There should not be any ", " or ";" symbols at the end of line.

## 2.1. dataParams

### 1. Top scale type [data | time]

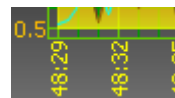
Data – shows retrieved data-source values. Time – shows time tag when the data-source value was retrieved



(data scale, 1.15)

### 2. Bottom scale type [data | time]

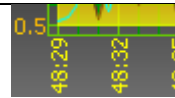
Data – shows retrieved data-source values. Time – shows time tag when the data-source value was retrieved



(time scale, 48:29)

### 3. Time format [mm:ss | hh:mm:ss]

hh-hours,mm-minutes,ss-seconds



(time format: mm:ss)

### 4. Dimension open symbol [ [ ] ]

[Kbps] ( [ ] )

### 5. Dimension close symbol [ ] ]

[Kbps] ( ] )

## 2.2. swParams and neParams

### 1. Units [ bps | bit/s | Bytes/sec]

K(kilo), M(mega), G(giga), T(tera) or OutOfRng(Out of range) will be attached automatically

[Kbps] (units: bps)

### 2. Factor [ 1000 | 1024 ]

1000x1000=Kilo or 1024x1024=Kilo

[Kbps] (factor: 1024)

### 3. Round digits [ 0 | 1 | 5 ]

in traffic mode axis and legend values will be rounded to appropriate number of digits

1.95 (round digits: 2)

### 4. Traffic mode [ true | false ]

Affects whole chart

### 5. Fixed maximum scale [ true | false ]

Only affects left and right axis.

### 6. Maximum scale value [ 1950 ]

Only if Fixed maximum scale is true



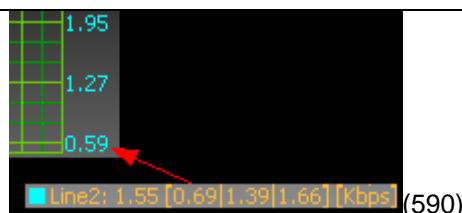
(1950)

### 7. Fixed minimum scale [ true | false ]

Only affects left and right axis.

8. Minimum Scale value [ **590** ]

Only if Fixed minimum scale is **true**



9. Values area size [ **3** ]

Values integer part size in symbols (without tenths separator  
(.) and rounded digits)



## 2.3. outerParams

1. Applet border width in pixels [ **0, 1, 2** ]

2. Line spacing between titles, values etc... [ **1, 2, 3** ]

3. Font [ **Arial, Courier, Tahoma** ]

If wrong font is specified, default "Arial" will be used without warning

4. Font size 1 (Top and Bottom graph titles) of the relevant font [ **8, 10, 12** ]

5. Font size 2 (Axis titles, legend titles and values) of the relevant font [ **8, 10, 12** ]

6. Font size 3 (axis values, on-chart values) of the relevant font [ **8, 10, 12** ]

7. Graph title top

8. Graph title bottom

9. Axis title top

10. Axis title bottom

11. Axis title left

12. Axis title right

13. Indicator

14. Refresh interval of applet data

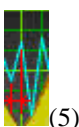
in mili seconds, please insure script will be able to return data and results will be able to reach applet during that period.

15. Data source [ <http://yourserverip/script.php> ]

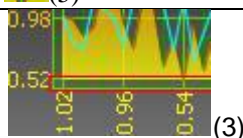
## 2.4. innerParams

1. Step

Period in pixels between two counter values



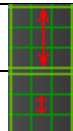
2. Horizontal chart inner margin (pixels) [ **0, 1, 3** ]



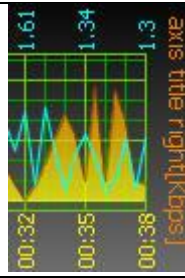
3. Vertical chart inner margin (pixels) [ **0, 1, 3** ]



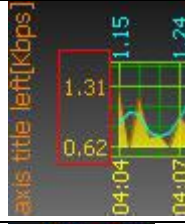
4. Major vertical grid density (pixels) [ **30** ]



5. Minor vertical grid density (pixels) [ **10** ]

6. Major horizontal grid density (pixels) [ **30** ]7. Minor horizontal grid density (pixels) [ **10** ]8. Data index to be displayed on the bottom axis [ **0** ]9. Data index to be displayed on the top axis [ **1** ]10. Display right axis [ **true** | **false** ]

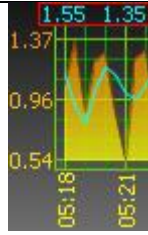
(false)

11. Display left axis [ **true** | **false** ]

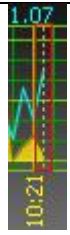
(true)

12. Rotated bottom axis values [ **true** | **false** ]

(true)

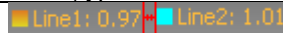
13. Rotated top axis values [ **true** | **false** ]

(false)

14. Indicator type [ **solid** | **dash** ]

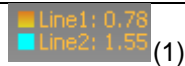
(type=dash, width=1)

16. Separating distance between two legends in the same line (pixels)



(separating distance=6, layout dynamic)

17. Legends per line



(1)

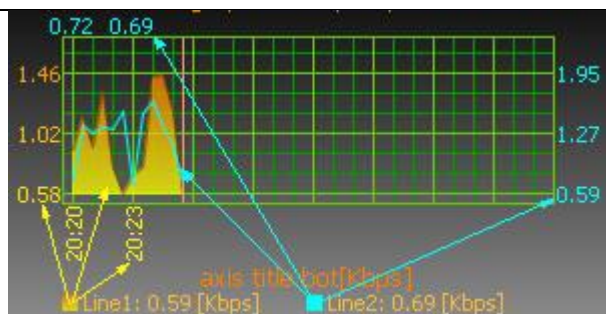
18. Legend layout [ **static** | **dynamic** ]

\*legend position will be adopted to graph width

(legends per line=2, layout=static)

19. Retain axis values colors [ **true** | **false** ]

\*If true, works only if 1 data-source per region is set, otherwise sets default color



(true)

## 2.5. colorParams

Put all the colors (Red, Green, Blue) used in the graph, separating them with semicolon. Remember index of each color.

index	0	1	2	3	4	5	6	7	8	9	10
RGB	0,0,0;	151,151,151;	255,128,0;	0,153,0;	102,204,0;	51,255,102;	255,153,102;	255,187,59;	0,255,255;	255,255,0;	255,128,0

## 2.6. objColsParams

1. Graph Border start color index [ 1 ]

2. Graph Border end color index [ 0 ]

if not a gradient - use the same index [1]

3. Graph background start color index [ 0 ]

4. Graph background end color index [ 1 ]

5. Graph title color [ 2 ]

6. Minor gridlines color [ 3 ]

7. Major gridlines color [ 4 ]

8. Chart border color [ 4 ]

9. Axis values color [ 5 ]

Effective only if innerParams "retain axis values colors" = false or more than 1 data-source per region

10. On-chart values color [ 5 ]

If swString or neString "display values on chart" = true

11. Indicator color [ 6 ]

12. Legend text color [ 7 ]

13. Axes labels color [ 2 ]

## 2.7. swString and neString

some notes before proceeding further:

swString or neString represents how each of data-source value is represented on the chart. Note that all data-sources in swString will have common left axis, so smallest value among all data-sources attached to swString will be the smallest left axis value and biggest value among all data-sources attached to swString will be biggest left axis value (except cases when SWParams will have "fixed maximum scale" or "fixed minimum scale" set to true). Also they will all have common "units" (bps) and "dimension factor" (1024).

There are no restrictions how you will represent per data-source values on the chart. They can all be displayed on SW region as well as on NE region and if you feel a demand to set different parameters for certain data-source groups - you can attach any data-source value on any region. There is one restriction - data-sources count must match swString+neString subcomponents count. So if your script will output 3 values and you will describe only 1 in swString and 1 in neString or 2 in swString (or 2 in neString) applet will throw an error.

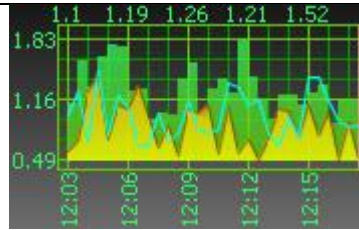
Layer schematic is simple - data-sources are displayed by ascending order (0, 1, 2...)

1. data source id

if script outputs something like "15 167 98" and you want 15

to be displayed here - enter "0", "1" for 168 etc...

2. chart type [ **line** | **plot** | **bars** ]

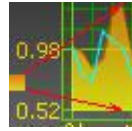


(type1=bars,type2=plot,type3=line)

3. Fill color start [ **color index** ]

4. End color start [ **color index** ]

line can also have gradient color



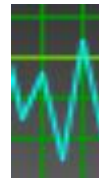
5. Alpha transparency index [ **0 - 255** ]

0=100% transparency, 255=no transparency

6. Smoothed (antialiased) contour [ **true** | **false** ]



(false)



(true)

7. Show details in Legend [ **true** | **false** ]

adds statistical information

Line2: 0.63 [0.49|0.71|1.46] [Kbps] (true)

Line2: 1.06 [Kbps] (false)

8. Name in legend

Line2: 1.06 [Kbps]

9. Show units in legend [ **true** | **false** ]

Line2: 1.06 Kbps

10. Show data-source's current value in legend [ **true** | **false** ]

Line2: 1.06 [Kbps]

11. Line type [ **solid** | **dash** ]

Only effective if "chart-type"=line

12. Line width [ **1, 2, 3** ]

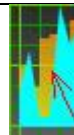
in pixels, only effective if "chart-type"=line

13. Show on-chart values [ **true** | **false** ]



(true)

14. Darken contours [ **true** | **false** ]



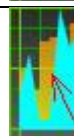
(false)



(true)

15. Hide data-source on chart [ **true** | **false** ]

hides line or plot, but displays legend values, axis values,  
reacts to axis changes



(false)



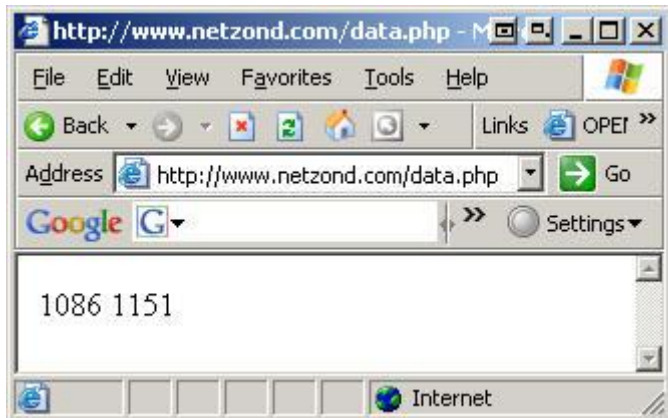
(true)

### 3. Example

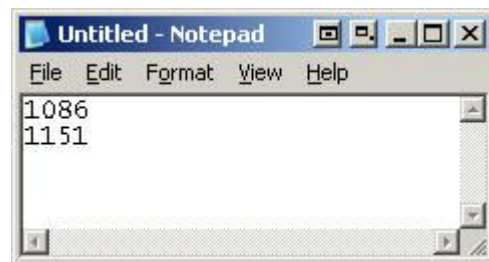
1. Insure you have JAVA JRE (run-time environment) installed on your system and it is not older than version 1.5.x  
You can download it from <http://jdk.sun.com/webapps/getjava/BrowserRedirect?locale=en&host=www.java.com>
2. let's begin with a simple php script. Create file data.php in your web server's root directory and put the following info there:

```
<?php
echo rand(500,1500)."\n";
echo rand(700,1700)."\n";
?>
```

3. check if it works:  
open <http://yourserver.com/data.php> - it should display two lines with random digits(image on the left below->)



(script returns random data values)



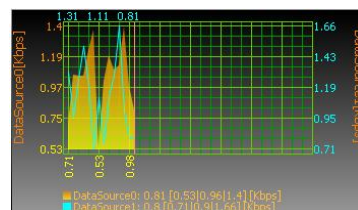
(and it's html source - plain text values separated with new line symbol)

4. create another file named applet.html on web server's root directory, also put netzond.class (or netzond\_demo.class) file there. Then write the following info to applet.html:

```
<HTML>
<HEAD>
<TITLE>Netzond Applet Demo</TITLE>
</HEAD>
<BODY>
<APPLET codebase="http:// yourserver.com /" code="netzond_demo.class" width=350 height=200>
<PARAM name="dataParams" value="data,data,mm:ss[,]>
<PARAM name="SWParams" value="bps,1024,2,true,false,30,false,5,3">
<PARAM name="NEParams" value="bps,1024,2,true,false,30,false,5,3">
<PARAM name="outerParams" value="1,1,Tahoma,8,10,12,,,,DataSource0,DataSource1,true,1000,http://yourserver.com/data.php?renew">
<PARAM name="innerParams" value="5,5,5,30,10,30,10,0,1,true,true,true,false,solid,1,6,1,dynamic,true">
<PARAM name="colorParams" value="0,0,0;151,151,151;255,128,0;0,153,0;102,204,0;51,255,102;255,153,102;255,187,59;0,255,255;255,255,0;255,128,0">
<PARAM name="objcolsParams" value="1,0,0,1,2,3,4,4,5,5,6,7,2">
<PARAM name="swString" value="0,plot,9,10,188,true,true,DataSource0,true,false,solid,1,false,false,false">
<PARAM name="neString" value="1,line,8,8,255,true,false,DataSource1,true,false,solid,1,false,true,false">
</APPLET>
</BODY>
</HTML>
```

\*note: you should have notice "url address" is a little bit different than the real-one (<http://yourserver.com/data.php?renew>) - it should eliminate the problem for users who are behind proxy server, which caches script data and applet shows non-changing information. "renew" by itself is meaningless.

5. Open applet.html with you browser. You should see similar view as in 1-st picture. If you see blank screen – something is wrong. To debug a problem – right click on the java icon on the bottom on the right of you windows taskbar (2) and look for error messages there.



(2)

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