

Nagios[®]

Addition of functionalities

Explanation and examples

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1. OBJECT OF THE DOCUMENT

This document presents the various modifications made to the Nagios software so that it can have cartography.

For that, it was necessary to add the management of a configuration file to Nagios for the use of a whole of maps according to the selected host.

Cartography makes it possible to better locate the servers which are supervised because there is a visual relation between the geographical site of the server and its name thus that makes it possible to better locate a problem when it arrives.

2. PRINCIPLE OF THIS NEW FUNCTIONALITY

This new functionality was added for the statusmap and more precisely a new visualization's method of the equipments. This method is in fact a mixture of two other methods with some modifications. The two methods used are « User-supplied coords » and « Depth layers ».

The desired functionality was able to make cartography for a WAN network extending on several French departments. For a better legibility, the method of the « Depth layers » was re-used because the concept of relative was interesting. However it was impossible to place the various elements on a precise site and even less to associate a chart according to the selected host. Nevertheless the two last functionalities are possible with the method « User-supplied coords » except that it is possible to use only one chart.

To have these functionalities, it was necessary to modify the code of Nagios. Thus, the two methods quoted previously were mixed to have all their functionalities. A configuration file was added for the management of the charts which is like the following :

```
define map{
    host_name      host_name
    map_name       map_name
    view_host_name [y/n]
}
```

The three options have the following functions :

- `host_name` : host name at which we give a map when it is selected
- `map_name` : map name associated with the host. It is assumed that the image resides in the HTML images path (i.e. `/usr/local/nagios/share/images`). This path is automatically determined by appending `"/images"` to the path specified by the `physical_html_path` directive. Note : The image can be in GIF, JPEG, PNG or GD2 format. However, GD2 format (preferably in uncompressed format) is recommended, as it will reduce the CPU load when the CGI generate the map image.
- `view_host_name` : the two acceptable values are `y` (yes) and `n` (no) which make possible to see or not the selected host name on the top left corner to have a generic chart (determined in the Nagios cgi configuration file as background image) but personalized with this name.

The disposition of these hosts is made with external data of the hosts (`2d_coords`) if they exist. Only the selected host and the parent host do not comply with these rules that are laid out in the top left corner of the chart.

3. VISUALISATION OF THE MODIFICATIONS

Here what one can see when the functionalities are added :



