

# Functions

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## Function mapping

Below is a table representing what kind of software (applications) that are used in different organisations to help maintain and realize certain functions.

| Function \ Organisation               | SUNET              | NORDUnet                   | RHnet                      | FSKnet   | UNINETT  | Funet  | BELNET                  | WASK  |
|---------------------------------------|--------------------|----------------------------|----------------------------|----------|--|--|-------------------------|---|
| Date updated                          |                    |                            | June 28 2011               |          |  | Feb 3, 2010  |                         | Mar 4, 2010   |
| <b>Console access</b>                 |                    |                            | local only                 |          | dialup modems  | dialup modems + Sentry commander, separate LAN (via DWDM)        |                         | local consoles on network devices, ILOMs on servers                         |
| <b>Documentation</b>                  | -                  | -                          | -                          | -        | -  | -  | -                       | text files  |
| CMS                                   | Sitevision         | -                          | None                       |          | Homemade DB (KIND)   | Plone (public web), wiki, mostly manual HTML                     | StayInFront Custom      | -   |
| Host inventory                        | Editgrid           | Editgrid                   | None                       |          | Homemade DB (KIND)   | (Homemade DB/scripts)  |                         | text files / OpenNMS  |
| Network configuration Management      |                    |                            | scripts                    |          |  | (homemade scripts)   |                         | complete configuration files stored on FTP/TFTP server, every 24h archiving |
| Network inventory                     | Telemator          | Homemade DB & Editgrid     | NetDisco                   | Homemade | Homemade DB (KIND)<br><a href="#">NAV</a><br>Telemator   | (Homemade)   | Immo3000                | OpenNMS   |
| Web publishing                        | Sitevision         | Confluence                 | manual                     |          | Homemade CVS replication<br>Drupal   | Plone (public web), Twiki/manual HTML (extranet)                 |                         | -   |
| Wiki                                  | -                  | <a href="#">Confluence</a> |                            |          | Dokuwiki   | Twiki  | MediaWiki               | -   |
| <b>Incident management</b>            | Jira               | Jira                       | RT                         | OTRS     | RT   | RT   | StayInFront Custom / RT | e-mail  |
| <b>Knowledge management</b>           | -                  | -                          | -                          | -        | -  | -  | -                       | -   |
| Incidents                             | Jira               | Jira                       | RT                         |          | RT<br>RTIR(security)   | RTIR   | Cares                   | e-mail  |
| <b>Measurements</b>                   | -                  | -                          | -                          | -        | -  | -  | -                       | -   |
| Network traffic                       | Zino               | Zino                       | MRTG/RRD                   | MRTG/RRD | Zino<br><a href="#">Stager</a><br><a href="#">genplot</a> <a href="#">NAV</a>                  | Zino   | MRTG                    | OpenNMS   |
| SLA                                   | Jira/Editgrid      | Jira/Editgrid              | SmokePing                  |          |  | (Homemade)   | outsourced              | OpenNMS   |
| <b>Surveillance</b>                   | -                  | -                          | -                          | -        | -  | -  | outsourced / Nagios     | OpenNMS   |
| Alarm dispatching                     | scripts /smgateway | scripts /smgateway         | scripts /autostatus        |          | zino/emt email<br>Homemade email-SMS-gateway with <a href="#">gammu</a><br><a href="#">NAV</a> | Nagios sms/smtp gateway and 3rd party service                    |                         | e-mail, SMTP/SMS-gateway 3rd party provider                                 |
| Environment monitoring                | -                  | iCamView                   | Homemade /RRD              |          | weathergoose + hobbit/munin  | (homemade/RRD, minimally implemented)                            |                         | OpenNMS for visualization, UPS connected probes                             |
| Log monitoring                        | Syslog             | Syslog                     | homemade syslog processing |          | Syslog   | Syslog (+homemade scripts for filtering)                         |                         | Syslog/Splunk for collecting and searching                                  |
| Routers and switches (traffic levels) | Zino               | Zino                       | MRTG/RRD                   | Homemade | Zino<br><a href="#">NAV</a><br>Genplot   | Zino   | outsourced / Nagios     | OpenNMS   |
| Routing policy                        | Scripts            | Scripts                    |                            |          | Scripts (expect)<br><a href="#">Homemade (pymetric)</a>  | (homemade)   | -                       | Scripts   |
| Servers                               | Nagios             | Nagios                     | None                       |          | Hobbit<br>Munin  | Nagios   | Nagios                  | OpenNMS   |
| Transport Network                     | Vendor proprietary | Vendor proprietary         | None                       |          |  | Vendor proprietary (+ integration to Nagios)                     |                         | -   |
| <b>Network address provisioning</b>   |                    |                            | Manual                     |          |  | NameSurfer   |                         | Text files  |
| <b>NOC Office arrangements</b>        |                    |                            | N/A                        |          | 3 wallmounted displays, customized web app, googleearth map                                    | not used   |                         | -   |
| <b>Reporting</b>                      | -                  | -                          | -                          | -        | -  | -  | -                       | OpenNMS   |
| KPI                                   | Confluence         | Confluence                 |                            |          |  | -  |                         | -   |
| SLA                                   | Jira/Editgrid      | Jira/Editgrid              | no SLAs                    |          |  | (homemade, for measurement only; no SLA agreements w/ customers) |                         | OpenNMS   |
| <b>Video conferencing</b>             | Adobe Connect Pro  | Polycom/Scopia             | Polycom                    |          |  | Videra (Polycom/Tandberg)  | Polycom                 | -   |

|                                |  |  |                      |  |  |   |  |         |
|--------------------------------|--|--|----------------------|--|--|---|--|---------|
| Network topology visualization |  |  | Homemade weather map |  | <a href="#">zino topological maps</a><br><a href="#">geographical maps</a><br><a href="#">Homemade (pymetric)</a><br><a href="#">googleearth KML</a> | DWDM: vendor proprietary<br>L2/L3: zino (!)<br>CWDM: (homemade) |  | OpenNMS |
|--------------------------------|--|--|----------------------|--|--|---|--|---------|

## Adding a new organisation to the function mapping table

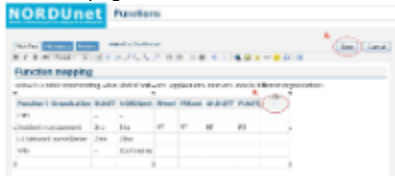
1. Click on the EDIT button in the top right part of the screen



2. Choose the "Rich Text" editing option in the top left part of the screen
3. Place the cursor in the rightmost column of the table
4. Press the "insert column after" button in the edit menu at the top of the screen



5. Add the name of your organisation in the topmost cell of the new column and add appropriate information in the cells below
6. Save the page



## Adding a new function to the function mapping table

Look through the table to see if there is a function group (function groups are written in **bold**) that the function fits into. Then see the explanation about adding a new organisation above and instead of adding a column in step 3 you add a row below the appropriate function group. If there is no function group that fits, create a new one.

## Function specification

What is interesting to document about each function that is listed in the above function mapping table. The below list of topics could be viewed as a table of content when starting to document a function.

**Feel free to add more things in the list!**

- Description
  - Description of the function
- Purpose
  - What is the purpose of this function
- Actors
  - Who benefits of this function, who performs the function and who can view the result of the function

## Adding a new function page to the wiki

1. Be sure to "be" on the [functions](#) page (this way the new page will end up under the function page in the hierarchy).
2. Choose Add->Page from the top right menu of this page.
3. Name the page and add the appropriate information about the function.
4. Do not forget to label the page with the label "function". You find the labels at the bottom of the page (this way the page will be shown in the functions list below).

## Function list

Below is a autogenerated list of all pages in the NORDUnet Operational Forum space with the label "function".

- [Surveillance](#)

build-in function