How to Build a 24x7 NOC Cheaply

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IUCC

Terena TF-NOC - Zurich
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Tier-1 Tender

- 1999 – issue tender to all ISPs in Israel
- 24x7x365 coverage
- Detail all services
  - Routers and links
    - SNMP R/O access
  - Servers
    - Services – DNS, SMTP, WWW, etc.
- Allow colocation of ISP server inside our network
  - Winning ISP decided on WuG in 1999
    - Probably today it would be Nagios
- 1000 Euro/month
  - The ISPs have 24x7 monitoring and we become just one additional screen in their NOC
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Tier-2

- ISP Tier-1 only handles identifying a problem – they are not mandated to resolve the issue
- Our engineering and NOC staff are one and the same
- All work fulltime at their universities as sysadmin and/or netadmins
- Need to somehow design a payment system
  - 100Euro per weekday coverage
  - 200Euro per weekend and holiday coverage
  - Full quarter costs about 13KEuro (62 weekdays and 31 weekends)
- “On call” NOCer has to be available at work or at home during his shift
  - Each NOCer earns an additional 750 Euro/month for 5 shift days
### June 2011 NOC Schedule

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Total yearly costs

- Tier-1
  - 1000 Euro x 12 = 12,000 Euro
- Tier-2
  - 13000 Euro x 4 = 52,000 Euro
- Total – 64,000 Euro per year and you have a 24x7x365 NOC
  - Less than 1FTE in Israel!!!
Your netadmins might be the same as ours