# Help Desk Services

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pre SANOG VI Workshops

This Presentation and related materials are availabe at
ws.edu.isoc.org/workshops/2005/pre-SANOG-VI/

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## Available Documents

**This presentation references several documents that you can use as you see fit. These include:**

- *Setting Up a Functional Support Organization:*
  http://www.nsrc.org/helpdesk/creating.html
- *CD-ROM Installer Practical Creation Tips*
  http://www.nsrc.org./helpdesk/cdr.html
- *And, Even More Information:*
  http/nsrc.org/helpdesk

## Why Helpdesk?

- We are discussing *scalable* solutions
- As networks grow so does your user base
- More users means more questions
- You will need to scale your support operations to deal with this
- I'll give you some ideas how, and maybe you will give us ideas as well

If you are a commercial ISP this information can help you stay competitive.

## Typical Scenario

You are a technician and you are doing Help Desk support. Small scale, or beginning ISP organization.

Generally this does not scale well.

## Getting Started

What are some of the first questions to answer?

- Are you going to offer support?
- What if you don't?
- As a business does this work?
- What do you want to or need to support?

## Scalability

- Do your tools scale? If not, design them so they will.
- Be flexible
- Do What's easier
- Quick "fixes" = Big overhead later
- Prepare to support what you users want, not what you want :-)

## Starting from Scratch

- Plan, plan, plan
- Design traffic flow
- Use available tools
- The Web - Use it!
- Some typical scenarios ==>

## Resources

- You'll probably need more resources than you have available.
- Where will you get these resources?
- What are resources?
  - Money, space, staffing, talent, administrative support, phones, networks, classes, etc.
- Become efficient and prioritize.

## Protecting Your Group

- Set hours
- Backup your consultants
- Write down your policies
- Second line of defense
- Acceptable Use Policies (AUPs)
- Issues you can't resolve

## Creating Your Help Desk

- Getting talent - What's the draw?
  - University, institutes, other?
- The logistics
- Remove roadblocks
- Creating Installers
- Creating CD-ROMs
- Document, document, document

## Creating Your Help Desk Cont.

Use the Web

Use Email

- The "From:" field
- Automated replies
- Database of replies
- Searchable index (Mhonarc)
  http://www.mhonarc.org/
- Help Desk tracking systems like Web RT
  http://www.fsck.com/projects/rt/

## Creating Your Help Desk Cont.

- Phone Systems
  - To use a hold queue or not. If busy, then yes.
  - Can users leave voice mail?
    - Depends on your support
    - Very high overhead
    - It's really bad not to call back.
  - Phone trees - Good and bad
  - Phone traffic flow (Reception, hardware, network group, consulting, etc.)

## Creating Your Help Desk Cont.

- Using other tools
  - ICQ - Watch Security
    http://www.icq.com/
  - GAIM (Linux)
    http://gaim.sourceforge.net/
  - NetMeeting
    http://www.microsoft.com/windows/netmeeting/
  - Remote Control software like VNC
    http://www.realvnc.com/
- Scheduling and scheduling software

## Proactive Steps

- Train your clients.
- Offer free or fee-based training.
- Push your documentation. This is critical.
- Push your Website
- Train your staff and train them some more.
- Assign staff projects.
- Stay up-to-date with what you support.

## Bigger Discussions

More detail on all of these availabe at:
http://www.nsrc.org/helpdesk

These include (a bit outdated at this point):

- Windows 9x version specifics
- RAM requirements
- Windows NT and 2000
- Bad hardware
- Winmodems
- Security

## CD-ROM Creation

The long document on this is at:
http://www.nsrc.org/helpdesk/cdr.html

This document and others referred available here:
http://ws.edu.isoc.org/workshops/2005/pre-SANOG-VI/

CD-ROM Document includes tips, tricks, tools and considerations for building an installer and placing it on CD-ROM.

## Real Life Scenario

Summary 1996, University of Oregon Computing Center in Eugene, Oregon, United States:

**The Scenario:**

- **18,000 students and 2,500 staff.**
- **Central Computing Center Help Desk consisted of 2 full-time staff, 6 part-time students, 1 phone line.**
- **Administration announced 6 weeks before the start of school they would charge a USD $50/term for computer use access.**

**Try to guess what happened: ==>**

## Real Life Scenario Cont.

**The result:**

- **8,000 students walked through the Computing Center doors to get their userids in the first week.**
- **Phone call daily average went from 50 calls/day to 400 calls/day average with a peak of 700 calls/day.**
- **In-person visits increased 5 times.**
- **Total user active accounts went from 7,000 to 20,000 in one term (3 months).**

**Additional resources allocated: ==>**

## Real Life Scenario Cont.

**Additional Resources First Year**

- 2 new part-time students.
- 1 new ½ time staff member.
- Some additional funds (20%).

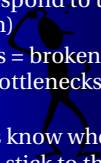
**Additional Resources Long Term**

- 1 new full-time staff member.
- Additional students (10-15) hired in-departments.
- Four additional phone lines.
- Departments hired more local support personnel.

## Real Life Scenario Cont.

**How Did this Work?**

- Leveraged available resources efficiently.
- Prioritized services.
- Created CD-ROM installer (critical!).
- Removed bottlenecks, even if painful (critical!).
- Built-up on-line Web infrastructure.
- Trained our users about what was available.
- Responded to what user's wanted.
- Obtained site-licensing of some software.

## Summary and Questions

- To be competitive you need to provide good support.
- Be flexible. Respond to users' wants (within reason)
- To many steps = broken process. Remove the bottlenecks, even if painful!
- Let your users know when support is available, and stick to that schedule.