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/

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.