CC5001 and CC3002

Support Help Desk

Support issues

- What do we need from system support?
- IS support service: the Help Desk
- Service Level Agreements
- Enhancement Requests

Help Desk

- Help Desk Characteristics
 - Purpose
 - Roles
 - Skills
 - Structure
 - Support models
 - Advantages and disadvantages
 - Issue tracking
 - Escalation
 - Customer responsibilities

Help Desk: Common titles

- Help Desk support function also called:
 - Computer Support Centre
 - IT Response Centre
 - Customer Support Centre
 - Technical Support Centre
 - IT Call Centre
 - IT Support Desk
 - ... etc.



Help Desk: Purpose

 "The Help Desk is essentially a central point through which problems or issues are reported and subsequently managed and co-ordinated.

From a general or wider perspective, it is an integral part of the service function, responsible for bringing resources together to address a problem or other issue."

Help Desk World (2002)

Help Desk: Roles

- Help desk roles:
 - Help desk manager
 - co-ordinates and controls Help Desk
 - allocates resources
 - Front-line staff -or- Help Desk operators
 - deal with customers reporting issues
 - Back-line staff -or- Help Desk technicians
 - deal with specialist issues

Help Desk: Skills

- Help Desk Skills
 - Pro-active
 - Focus
 - Problem-solving
 - Communication
 - Technical expertise
 - Customer service

(Czegel, 1999)

Help Desk: Action

- Customer identifies difficulty/problem/issue...
- Customer reports concerns to Help Desk
- Help Desk receives and logs items
 - telephone
 - email
 - dedicated support web-site
 - in person
 - written request/form



Items referred to different support levels until resolved

Help Desk: Action

Support levels may be

- first, second and third level support

- front-line and back-line
 - may be more than one level of back-line support

Help Desk: Action

- New issues logged in a dedicated Help Desk Management IS
 - unique reference number is generated for each issue

 Help Desk Management IS used to track issues until resolved

Help Desk: interaction

Old version of London Met Help Desk

New version of London Met Help Desk

London Met Student Help Desk

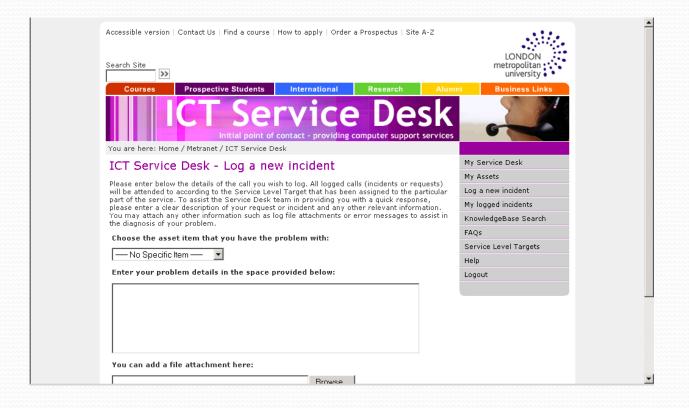
(old version)



(old version)



(old version)

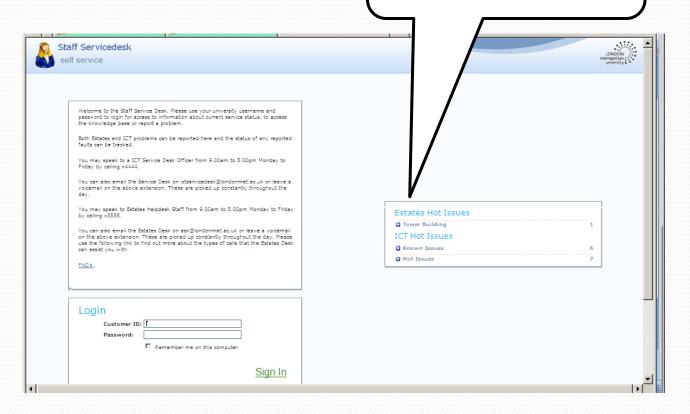


(new version)

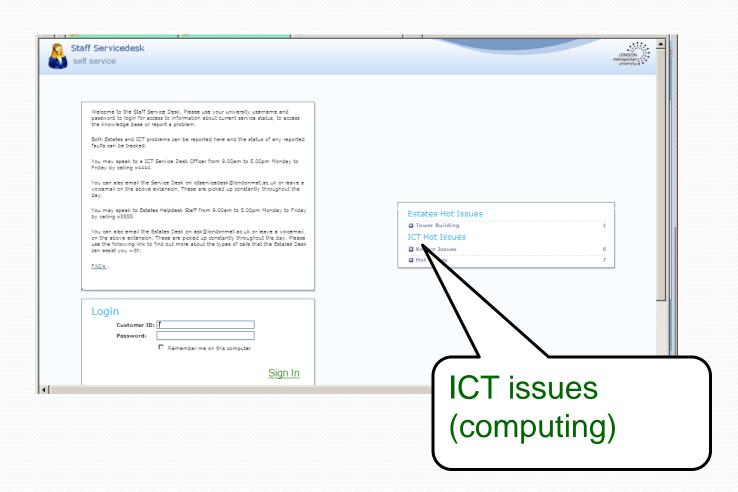


(new version)

Estates issues (buildings)

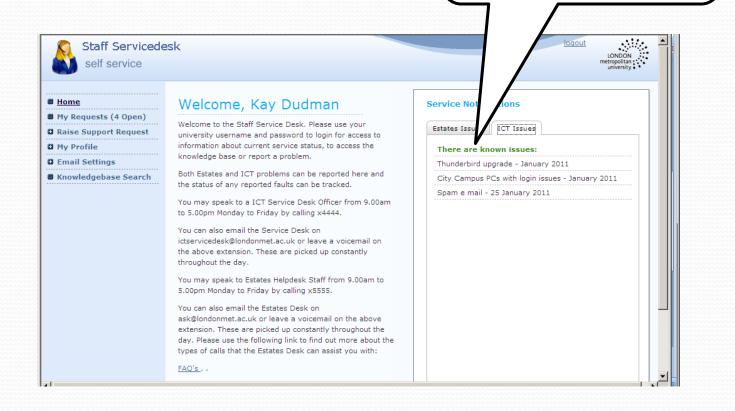


(new version)



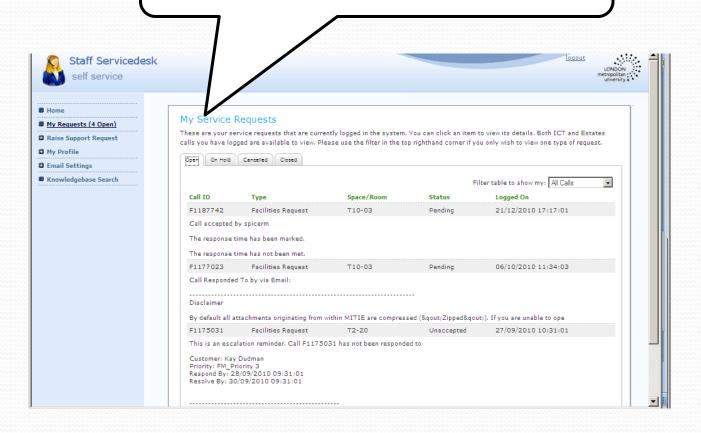
(new version)

Known issues highlighted



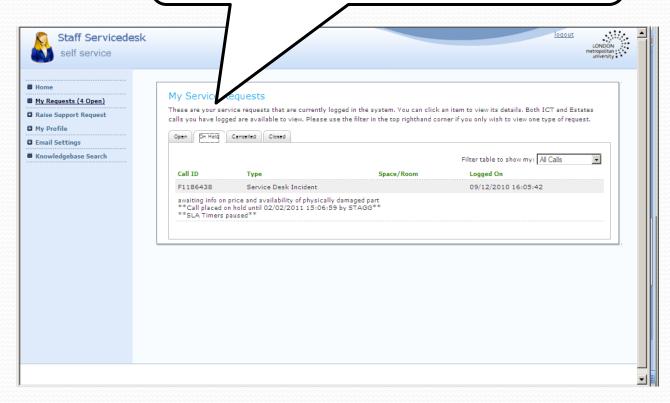
(new version)





(new version)

Status of ICT issue raised (on hold)



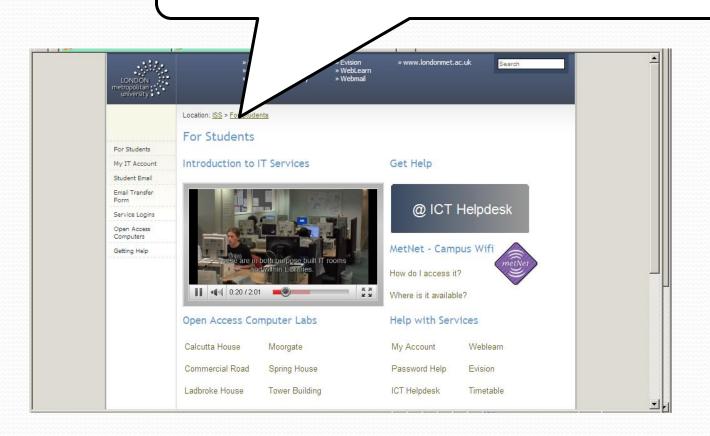




Londonmet Helpdesk for students

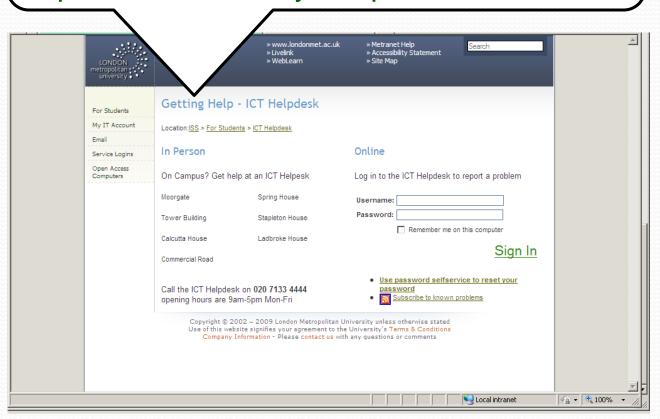
https://intranet.londonmet.ac.uk/iss/students/students_home.cfm

Video: introduction to IT Services

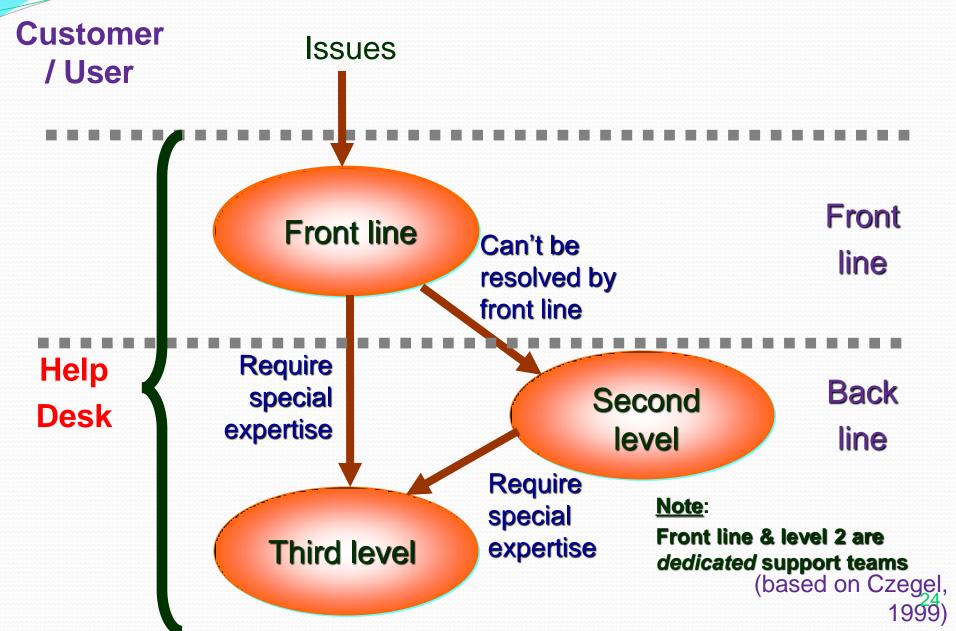


Using Londonmet Helpdesk

https://servicedesk.londonmet.ac.uk/sw/student/ How to report an issue: in person, online, by telephone



Help Desk: Typical structure



Help Desk: Support models

Tourniaire and Farrell (1997)

Front-line/Back-line

or

Touch and Hold

Overall model for front-line and back-line

Help Desk: Support models

- Czegel (1999)
 - Resolve

or

- Dispatch
- Approach taken by front-line
 - may determine our overall support model

Front-line: Resolve or Dispatch

- Role of front-line support staff
 - Resolve try to solve the problem first
 - Attempts to deal with the problem
 - Passes problem to next stage if not resolved within a certain amount of time
 - Dispatch refer the problem immediately
 - Support issue received and logged
 - immediately passed on to appropriate second or third level support group

Front line: Resolve or Dispatch

- Back-line teams divided into specialist support groups
 - Hardware
 - Operating system
 - Application software, etc.
- Each of these groups will have its own support queue
- Front-line staff
 - dispatch issue to appropriate support queue



Front-line / Back-line model

- Help Desk staff organised in 2 groups:
 - Front-line
 - Team of junior support staff
 - Try to resolve issues within a set time period
 - Back-line
 - Team of more senior support staff
 - Take on issues front-line team has not resolved

Front-line / Back-line model

Advantages

Utilises staff effectively

Provides training / career path

Predictable customer model





Disadvantages

Issues require a handover

Takes time

Risk of information loss

Customer interacts with several people,

Touch and Hold model

- Help Desk has front-line and back-line
 - front-line retain "ownership" of the issue
 - supported by more experienced back-line staff
 - no handover from front-line to back-line

Touch and Hold model



Advantages

Fewer handovers

Front line staff more skilled

Smoother workflow





Disadvantages

Better qualified staff required for front line Requires tighter management of back line staff

Both FL/BL and T&H require third level extension

Support issue: life cycle

- Activities need to be logged:
 - Contacting the customer/user
 - Escalating the issue
 - Recording results
 - Resolving the issue
 - Update support issue archive

Support issue: life cycle

- Activities need to be logged:
 - Contacting the customer/user
 - Escalating the issue
 - Recording results
 - Resolving the issue
 - Update support issue archive

Support issue: life cycle

- Contacting the customer
 - ring customer/user with progress report
 - send customer email updates
 - contact customer for more information
 - attach further information to the issue
 - screen shots showing problem
 - error messages, etc.
 - arrange visits to resolve the issue
 - inform users about known problems

Contacting the user: new call logged

From: ICT Service desk <ictservicedesk@londonmet.ac.uk>

To: Kay Dudman <kay.dudman@londonmet.ac.uk>

Subject: New Logged call F0012345

Dear Kay

Thank you for logging a call with the ICT Service desk.

Your call has now been registered on our System under the reference F0012345 and has been assigned to the relevant group for resolution.

Please note that you can view the progress of your call by going to our self service webpage. This can be found at:-

Http://ictservicedesk.londonmet.ac.uk

If you have any queries or updates regarding this call, please let us know by replying to this email

Contacting the user: update

From: ICT Service desk <ictservicedesk@londonmet.ac.uk>

To: Kay Dudman <kay.dudman@londonmet.ac.uk>

Subject: call Update on F0012345

Dear Kay

There has been an update on your call reference F0012345

The progress is as follows:

Network drives are preset, but not Customer's local drive.

If we require further information from you, please reply to this email with the requested information as soon as possible so that we may continue to progress your incident.

Please note that you can view the progress of your call by going to our self service webpage. This can be found at: Http://ictservicedesk.londonmet.ac.uk

Contacting the user: nearly resolved

From: ICT Service desk <ictservicedesk@londonmet.ac.uk>

To: Dr Kay Dudman <kay.dudman@londonmet.ac.uk>

Subject: RE: Your call ref: F0012345 has now been resolved.

Hi

There is a problem on the servers at the moment that is causing this. Hopefully it will be resolved soon.

Regards

Contacting the user: arrange visit

From: ICT Service desk <ictservicedesk@londonmet.ac.uk>

To: Kay Dudman <kay.dudman@londonmet.ac.uk>

Subject: call Update on F0012346

Dear Kay

There has been an update on your call reference F0012346

The progress is as follows: Is there a time that I may call to check your login?

If we require further information from you, please reply to this email with the requested information as soon as possible so that we may continue to progress your incident.

Please note that you can view the progress of your call by going to our self service webpage. This can be found at: Http://ictservicedesk.londonmet.ac.uk

Contacting the user: on hold

From: ICT Service desk <ictservicedesk@londonmet.ac.uk>

To: Kay Dudman <kay.dudman@londonmet.ac.uk>

Subject: call Update on F0012346

Dear Kay

Your call has now been placed On Hold, your call is On Hold because:-:

Monday at about 12.00 noon is fine.

Please note that you can view the progress of your call by going to our self service webpage. This can be found at: Http://ictservicedesk.londonmet.ac.uk

Regards

Contacting the user: resolved - successful

From: ICT Service desk <ictservicedesk@londonmet.ac.uk>

To: Kay Dudman <kay.dudman@londonmet.ac.uk>

Subject: Your call ref: F0012346 has now been resolved.

Dear Kay

Your call has now been closed, your call was closed because:

Created new profile for user.

Call resolved by ARNIE

If you feel that your call has not been resolved, please reply to this email stating why so that we may reopen and reassign the call with your update.

Contacting the user: resolved - unsuccessful

From: ICT Service desk <ictservicedesk@londonmet.ac.uk>

To: Kay Dudman <kay.dudman@londonmet.ac.uk>

Subject: Your call ref: F0012347 has now been resolved.

Dear Kay

Your call has now been closed, your call was closed because:

There are no files in this users area that match the criteria specified **Call resolved by MAGGIE**

If you feel that your call has not been resolved, please reply to this email stating why so that we may reopen and reassign the call with your update.

Contacting the user: resolved - unsuccessful

From: ICT Service desk <ictservicedesk@londonmet.ac.uk>

To: Kay Dudman <kay.dudman@londonmet.ac.uk>

Subject: Your call ref: F0012348 has now been resolved.

Dear Kay

Your call has now been closed, your call was closed because:

As before have checked with new power cable. The power supply unit is dead.**Call resolved by GORDON**

If you feel that your call has not been resolved, please reply to this email stating why so that we may reopen and reassign the call with your update.

Regards

Contacting the user: mailbox too large

From: ICT Systems <postmaster.city@londonmet.ac.uk>

To: Fred Blogger <fred.blogger@londonmet.ac.uk>

Subject: *** Large INBOX - First Warning ***

An automatic scan of our e-mail system has shown that your e-mail INBOX is too large.

Having a large INBOX will slow down the performance of the email server, increase the time it takes you to access your email, and increase the chance of your INBOX becoming corrupted.

You will find that keeping your email INBOX within a reasonable size limit will help to increase the performance of your email.

We recommend that an e-mail INBOX should be used only for NEW email, and should not be allowed to grow above 100Mb and/or 200 messages.

more on next slide...

Contacting the user: mailbox too large

Continued...

To accomplish this, it is recommended that each month you file old read messages into different subject folders, or file your whole INBOX into time-based folders, such as INBOX_May2009, INBOX_Jun2009, etc.

Alternatively, sort your INBOX by message-size and delete some old large messages to quickly reduce your INBOX size.

This is the FIRST of three warnings.

This message is to give you the chance to do your own e-mail housekeeping. The automatic scan will run again at intervals of one week and if your INBOX is still too large in two weeks from now, it will be automatically moved to a folder and you will be informed how to access it.

If you require help with using email folders, please contact the ICT Service Desk for assistance.

Contacting the user: planned down time

From: Harry Bartlett < h.bartlett@londonmet.ac.uk >

To: users@lists.londonmet.ac.uk

Subject: Livelink downtime

Hello All,

The livelink servers need to be patched. This work will take place between 7am-9am tomorrow morning, 16th October and livelink will be unavailable whilst the work is being done.

Regards, Harry

Informing the user: more down time

• I know, I'll just check my timetable...

OK

The server is temporarily unable to service your request due to maintenance downtime or capacity problems.

Please try again later.



...oh, dear!

Informing the user: more down time

• I know, I'll just check who is on the module...

Service Temporarily Unavailable

The server is temporarily unable to service your request due to maintenance downtime or capacity problems.

Please try again later.



...oh, dear!

- Activities need to be logged:
 - Contacting the customer/user
 - Escalating the issue
 - Recording results
 - Resolving the issue
 - Update support issue archive

- Escalating the issue
 - escalate issue to another level
 - for technical reasons
 - issue not solved in given time
 - greater level of authority required



Escalation

What is meant by escalation?
 "...reassigning an incident to a new resource that may have more specific expertise, available time or authority to resolve the issue."

Microsoft, 1997

 Escalation raises the profile of an issue and is triggered by certain criteria

Escalation

- Types of escalation
 - Technical
 - escalate issue to second or third level support as greater expertise is required

Escalation

- Types of escalation
 - Management
 - escalate to management because greater
 authority is required
 - e.g. unclear whether issue is within scope of agreed support plan

Escalation procedures

- Priority may escalate an issue automatically
 - Jorgensen's fault severities
 - 10 categories: Mild to Infectious
 - Basic priority scale: low / medium / high
 - Czegel's priority based on impact on business

Escalation procedures

- Issue may be escalated
 - Specified, fixed time since issue logged
 - front-line try to resolve in 30 minutes
 - if unsuccessful, issue passed to next stage

Escalation procedures

- Issue may be escalated
 - Customer requests escalation
 - Clear procedures identify contact person
 - Help Desk manager
 - Request to increase priority of issue

- Activities need to be logged:
 - Contacting the customer/user
 - Escalating the issue
 - Recording results
 - Resolving the issue
 - Update support issue archive

- Recording results
 - nature of issue
 - results of investigation
 - solution approaches
 - how resolved
 - writing background notes



Issue tracking

- Need to keep track of support issues
- Specialist Help Desk Management IS used
- Record details of each support issue
- Support issue information used to manage
 - individual support issues
 - overall performance reporting
 - meeting targets for response/resolution

Issue tracking

- Details recorded for each support issue: initially
 - How to identify the issue
 - the unique issue reference number
 - Who logged the issue
 - which customer, i.e. company, person's name, contact details, etc.
 - When the issue was logged
 - date and time
 - What the priority of the issue is
 - high, medium, low or other scale

Issue tracking

- Details recorded for each support issue: in progress
 - What the current status of the issue is
 - open, in progress, resolved
 - Who currently "owns" the issue
 - name of support staff currently working on the problem
 - What has happened to date
 - a history of events

- Activities need to be logged:
 - Contacting the customer/user
 - Escalating the issue
 - Recording results
 - Resolving the issue
 - Update support issue archive



- Resolving the issue
 - communicate resolution to customer
 - check the resolution worked
 - confirm closure of the issue

- Activities need to be logged:
 - Contacting the customer/user
 - Escalating the issue
 - Recording results
 - Resolving the issue
 - Update support issue archive



- Update support issue archive
 - recording details of support issue
 - recording details of resolution
 - update knowledge base
 - help resolve similar issues in the future

Support plan

- Sometimes called:
 - a customer care plan
 - a service level agreement
- Defines level of service customer can expect

Support plan

- A support plan defines
 - what is supported
 - scope of support, categories of issue
 - who is supported
 - support recipients (users, managers)
 - how it is supported
 - Help Desk procedures
 - when it is supported
 - hours of service (and what to do at other times)
 - why it is supported
 - objectives of support service

Customer responsibilities

Customers must know reporting procedures

- who can report support issues
 - may be able to report issue themselves
 - may need to report issue to user representative
- what *information* must be provided
- how to contact the Help Desk

Customer responsibilities

- Customer may be obliged to ensure
 - all users have received training before
 - using IS
 - before being allowed to receive support
 - proper security procedures are observed e.g.
 - no unauthorised access to IS
 - adequate backup strategy in place, used, etc.

Support plan

- Two-way agreement
 - what the **Help Desk** will do
 - targets for responding & resolving issues
 - what the **customer** will do
 - reporting support issues appropriately



Summary

- Help Desk
 - Purpose
 - Roles
 - Skills
 - Action
 - Support models
 - Touch & Hold
 - Front Line / Back Line
 - Front Line: Resolve or Despatch
 - Support issue life cycle
 - Issue tracking
 - Escalation
 - Support plan



Any questions?

Further reading

- Beynon-Davies, P. 2002, Information systems, Palgrave
- Chaffey, D. (ed.) 2003, Business Information Systems, 2nd edition, FT Prentice Hall
- Greasley, A. (ed.) 2006, Business Information Systems: technology, development and management for the e-business, 3rd edition, FT Prentice Hall
- Jorgenson, P. 1995, *Software Testing: a Craftsman's Approach*, CRC Press cited in Chaffey (2003)
- Czegel, B. 1999, Help Desk Practitioner's Handbook, Wiley
- Help Desk World, 2002, What is a Help Desk? Retrieved: 18 February 2013 from http://www.help-desk-world.com/help-desk.htm
- Microsoft, 1997, Microsoft Sourcebook for the Help Desk, 2nd edition, Microsoft Press International
- Mohr, J., 2005, The Help Desk. Retrieved: 18 February 2013, http://www.jimmo.com/modules.php?name=Content&pa=list_pages_categories&cid=11
- Tourniaire, F. & Farrell, R. 1997, The Art of Software Support, Prentice Hall
- Help desk and service desk definitions Retrieved: 18 February 2013, from http://searchcrm.techtarget.com/definition/help-desk and http://searchwinit.techtarget.com/definition/service-desk