

*reS nova consult*  
...aktiv in AIX

# ADSM Monitoring

**...the key to successful operation of ADSM**

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Michael Abel  
res nova consult

# Michael Abel

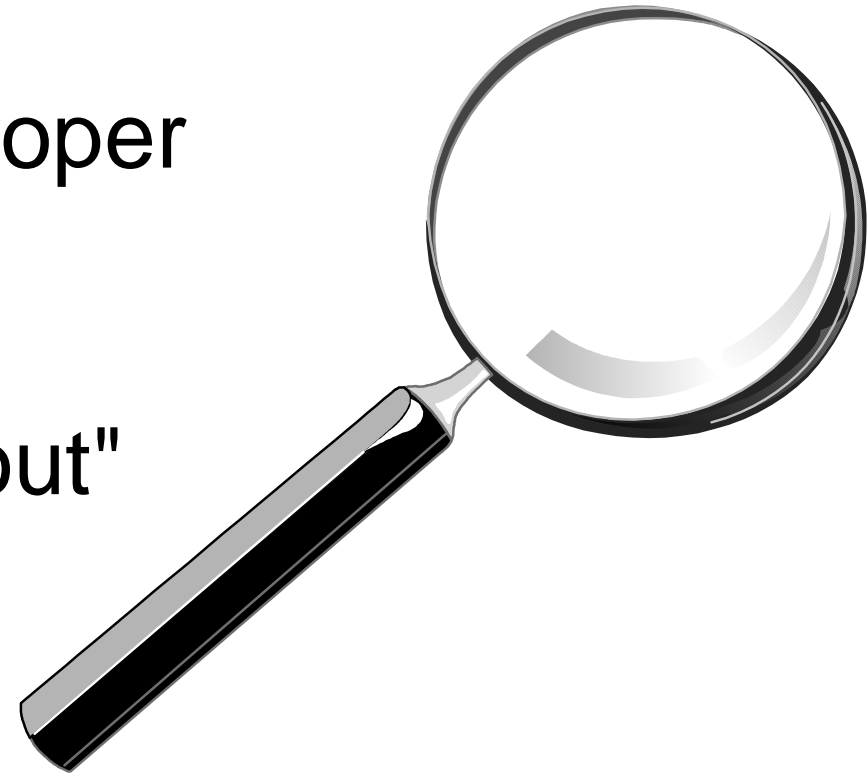
- Diplom-Betriebswirt (BA)
- with IBM Germany until 1990
- founded resnova in 1992
- certifications from  
IBM (ADSM, AIX,...)  
Lotus (Notes/Domino)

# res nova Unternehmensberatung

- Our services:  
consulting, operations and training for  
AIX since 1992
- Our product range:  
AIX, NT, DB2/UDB, Notes/Domino,  
ADSM & companion products
- Our partnerships:  
IBM BP, Lotus BP, Team ADSM etc.

# Why monitor ADSM?

- ADSM is an important part of the IT infrastructure of your enterprise
- You want to assure proper operation of ADSM
- You want to enable 24\*7\*365 and "lights out" operation



# What to monitor? (non-technical aspects)

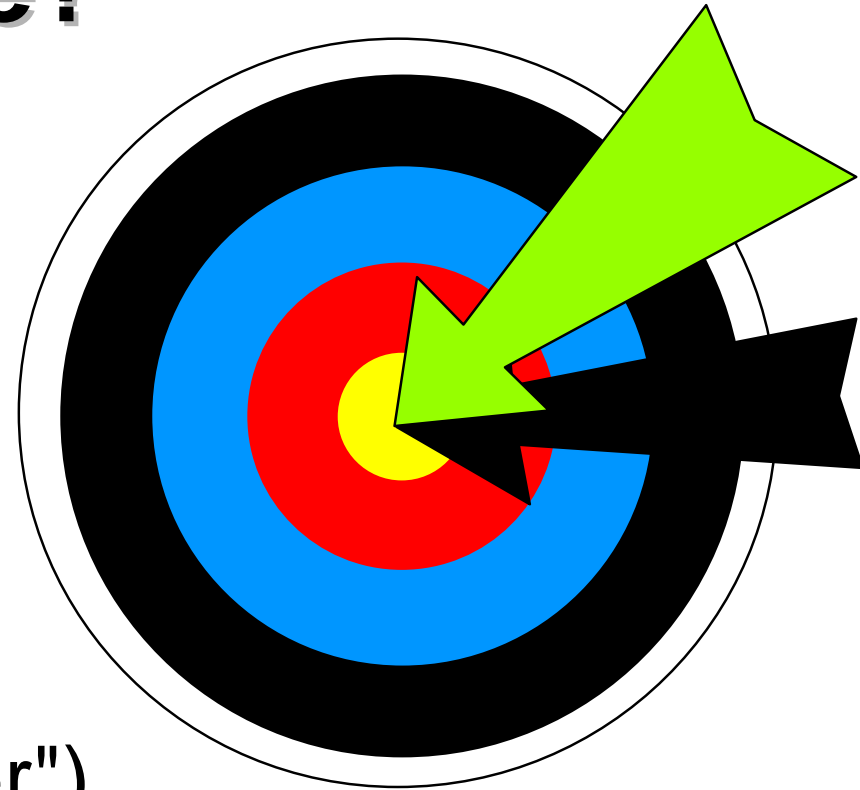
- Is ADSM working as expected?
- Do I meet my SLAs?
- Is the "application" ADSM available and performing?
- Can I deal with the growing number of clients and increasing amount of data?
- What about immediate notification in case of errors?

# Where can I get information?

- Different types of information available at different sources of information:
  - ▶ Operating System (device errors, disk performance)
  - ▶ Network (performance, availability)
  - ▶ ADSM Client logs (errors, details)
  - ▶ ADSM Server logs (general operation, comprehensive source)
  - ▶ ADSM database (media usage and status)
  - ▶ ADSM files (accounting)

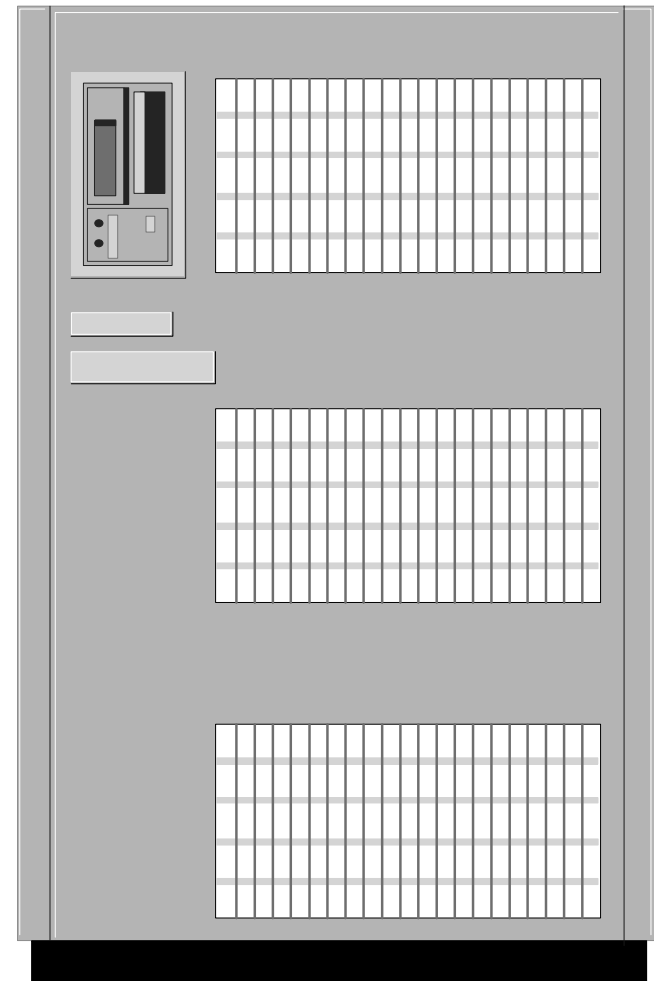
# What is my objective?

- easy,
- cost-effective,
- comprehensive,
- monitoring of ADSM
- to enable
  - ▶ analysis ("flight recorder")
  - ▶ alerts ("out-of-band")
  - ▶ planning (statistics)



# Examples: Tape Errors (1/5)

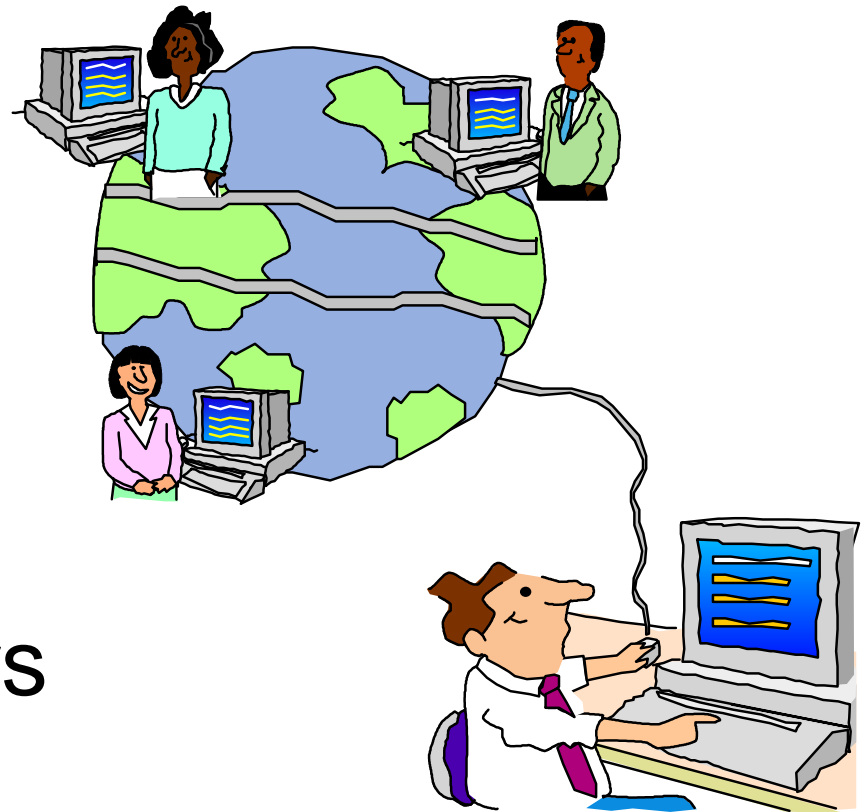
- errors detected by OS and ADSM
- check for tapes in error state
- check for tape drive errors
- cyclic "audit vol" on all tapes





# Examples: Client Errors (2/5)

- no connection to ADSM Server
- problems with files during backup
- performance problems
- OS specific errors
- Client specific errors
- API connections!!!



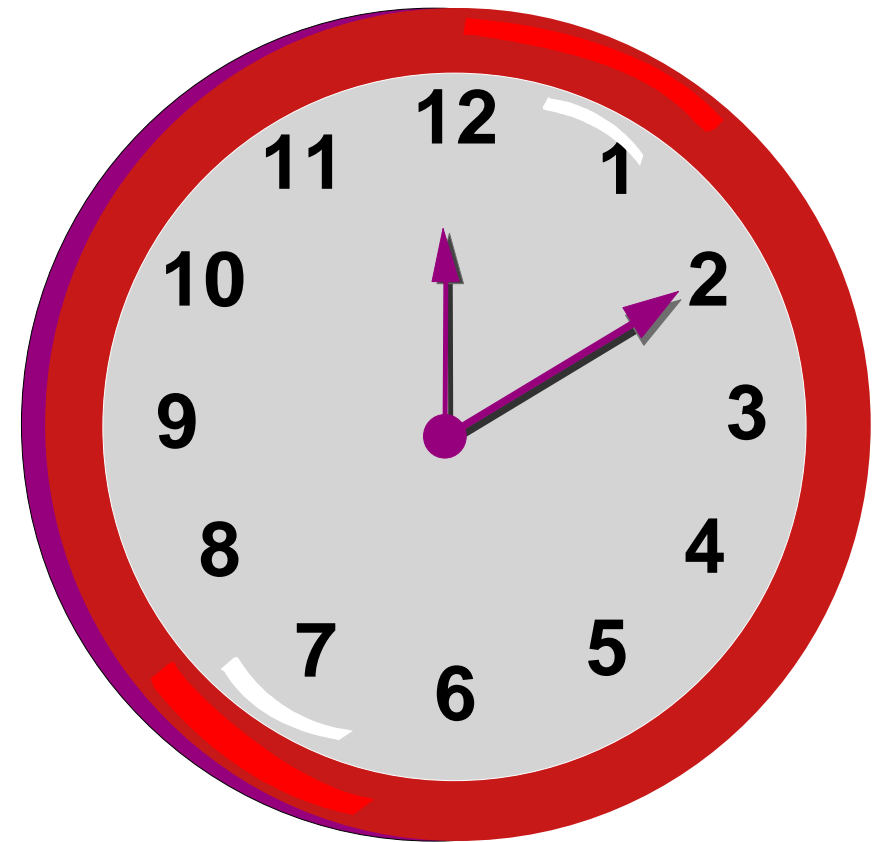
# Examples: Server Operations (3/5)

- check for
  - ▶ database backups
  - ▶ migration of diskpools to tape
  - ▶ used and free capacity on disk and tape
  - ▶ client operations
  - ▶ administrative commands



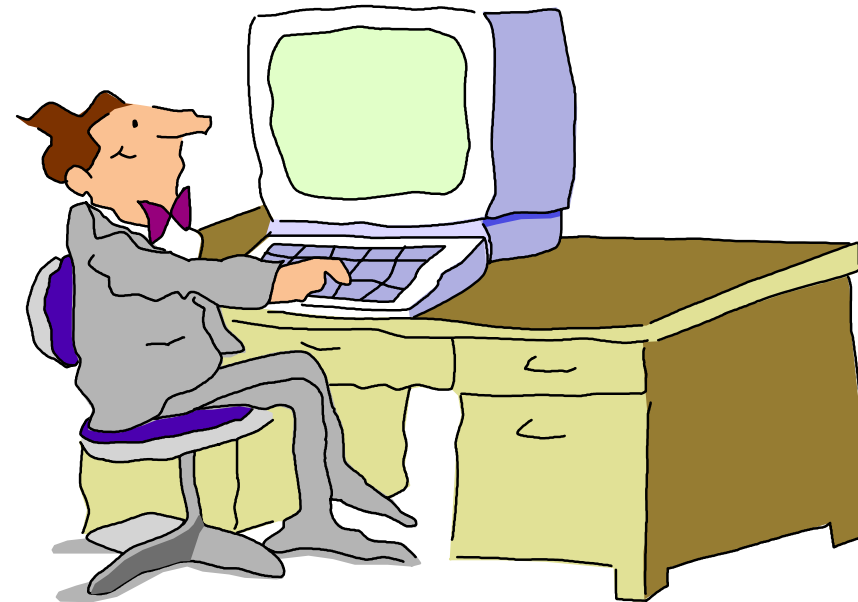
## Examples: Statistics (4/5)

- clock-wall time measurements
- amount of data
- check if capacity needed is available
- check for growth rates
- plan and prepare for expansion



# Example: High-Level Reports (5/5)

- audience: operating, endusers or management
- content:
  - ▶ last backup ok (y/n)
  - ▶ amount of data
- look:
  - ▶ Intranet (colorful web)
  - ▶ printed reports

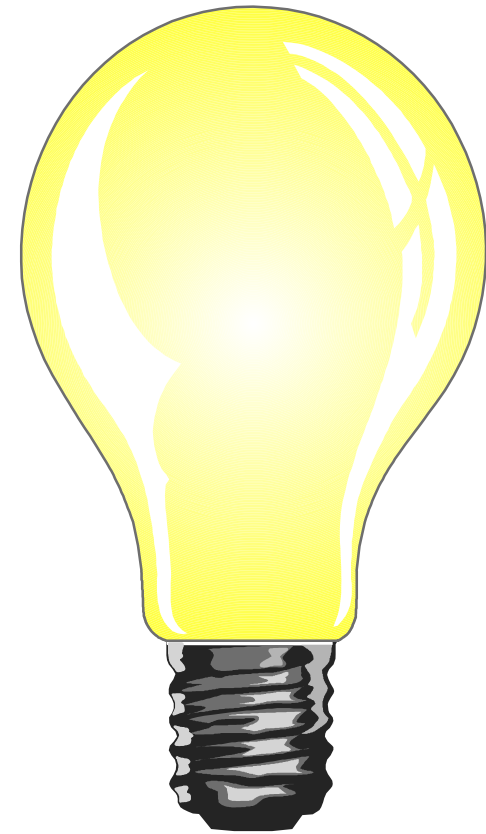


# How can I access monitoring information?

- First get information out of ADSM and process; then access
  - ▶ get data interactively (Admin Clients)
  - ▶ browse text files
  - ▶ convert to HTML on your Intranet
  - ▶ send emails (also SMS, pagers etc.)
  - ▶ use event handlers
  - ▶ use tools like T/EC, CA TNG, HP OV
  - ▶ script your own solution (swatcher)

# Available Solutions (Overview)

- Many homegrown tools (see ADSM-L)
- Add-Ons available like
  - ▶ MainStar: Manager/ADSM
  - ▶ TME integration for ADSM
  - ▶ SAMS: Vantage (Sterling)
  - ▶ STORServer Manager (SSSI)
  - ▶ etc...

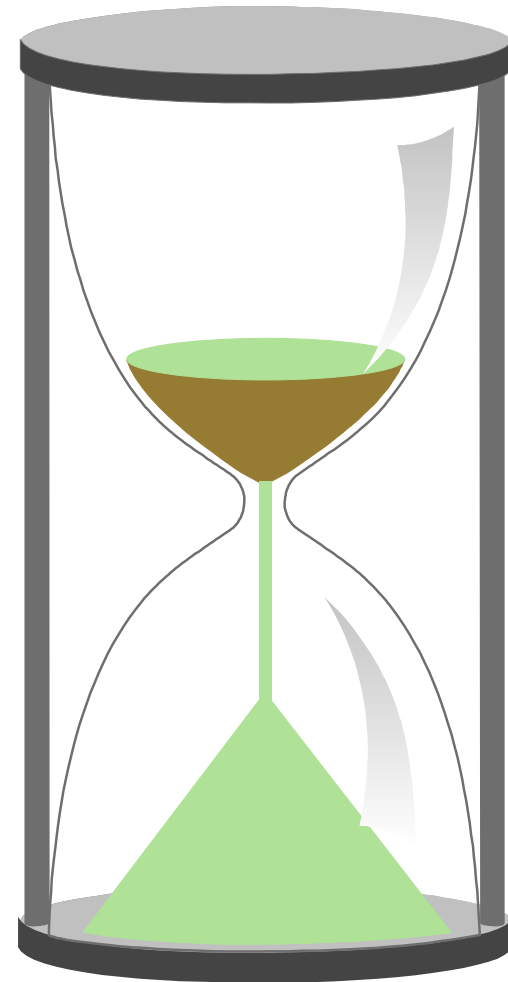


# Available Solutions (Examples)

- Email notification in out-of-band situations
- ADSM status webpage on Intranet
- Selected ADSM Error messages forwarded to Tivoli Enterprise Console
- Scripts to check availability of ADSM Server from every client (probing)
- SMS message if important database backup has RC!=0 (API save)

# Discussion

- any questions?
- or comments?
- or experiences to share?





# More information & contact

res nova Unternehmensberatung GmbH  
Ruppmannstrasse 41  
D-70565 Stuttgart

Tel: +49 711 78888-0  
Fax: +49 711 78888-99  
Email: [info@resnova.de](mailto:info@resnova.de)  
URL: <http://www.resnova.de>

