

## Successful operating of RedDot infrastructures

The time of RedDot servers underneath your desk are over!



3rd European RedDot Usergroup Conference

# Efficient

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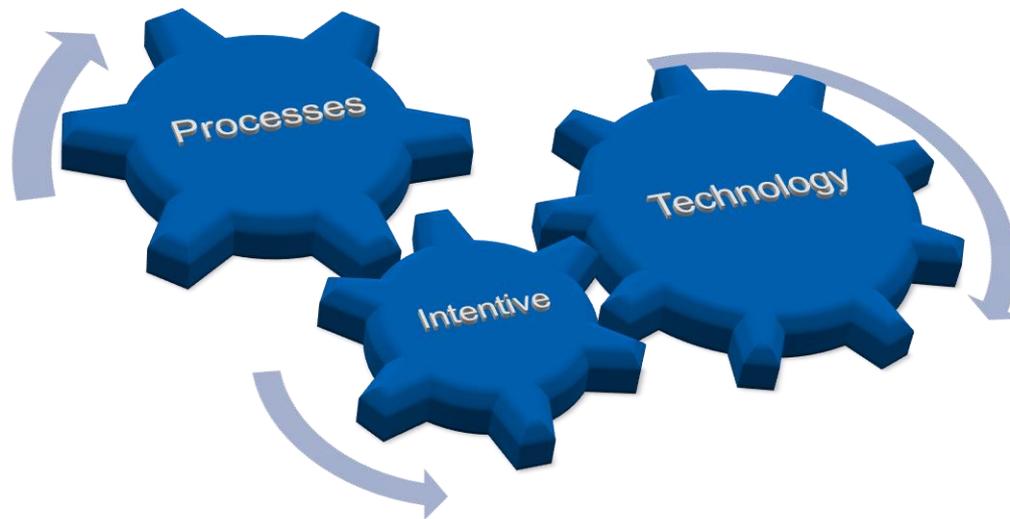
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We are the link between technology and business processes



- Long-time expertise continuous growth
  - Founded in 2003
  - Experience from nearly 150 IT consulting & IT operating and RedDot projects
  - Since 2003 Partner of RedDot Solutions
  - Operating of RedDot infrastructures and RedDot consulting u.a. für
    - Messe Düsseldorf
    - German Protestant Church
    - Henkel
    - ... and more

# Successful operating of RedDot infrastructures

## Content

- **Starting situation**
- **What does one need for successful RedDot operating**
  - Processes
  - Communication
  - Knowledge- and Configuration-Management
  - Technology
- **Conclusion**

Starting situation

## What does RedDot CMS servers do?

- **RedDot CMS-Server** are standing in a more or less professional data centre and do their job,
  - But sometimes not, they ...
    - ... have problems with publication.
    - ... have Bugs in the RedDot software.
    - ... have a bad usability.
    - ... are slow.
    - ... crash ...

Starting situation

## What does RedDot Liveservers do?

- **RedDot Liveservers** are standing in a more professional data centre with high speed internet access and deliver pages.
- But sometimes not, they ...
  - ... shut down because of capacity overload..
  - ... deliver aged content.
  - ... the hard disked overflow ...

Starting situation

## What does RedDot administrators do?

- **RedDot administrators** take care for the problem-less operation of the infrastructure.
- But sometimes not, they ...
  - ... do „fire-fighting“ instead of sustainable problem analysis and finding of permanent solutions.
  - ... solve problems somehow, because the next problems are waiting.
  - ... don't have time for preventive measures.
  - ... already found the solution of a problem in the past but don't remember.
  - ... are unhappy ....

Starting situation

## What does RedDot editors do?

- **RedDot editors** maintain and edit contents of intra- and internet.
- But sometimes not, they...
  - ... need professional help but nobody is available.
  - ... are at a loss and bodge something together.
  - ... don't know if they did everything in a correct way.
  - ... don't know the new an better way to do something.
  - ... are frustrated ...

Starting situation

## Isn't there a better way?

- RedDot Solutions is one of Europe's most successful companies in their business.  
→ RedDot can't be so bad!
- Other systems in our company work well, too!  
→ Hardware and infrastructure can't be so bad!
- Our employees handle other applications successfully.  
→ Admin's can't be so stupid!

→ Everything correct –  
but where is the problem?

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## Fitting basic conditions are necessary!

- RedDot products build up a complex IT system, the basic conditions for the operating have to be adjusted for that situation. This is possible as SAP, Exchange & Co. are operated successful, too.
- **Processes** → Who does what and when?  
Admin's, editors and external service providers need defined processes to collaborate without problems. .
- **Communication** → Who talks to whom and when?  
A clear line of communications guarantees that everybody knows of problems and their solutions..
- **Knowledge- and Configurations-Management** → Where does all the wisdom end?  
You can only share your experiences if you write down problems, solutions and side effects. You don't have to invent the wheel twice.
- **Technology** → A fool without a tool - stays a fool.  
Professional tools guarantee a successful operating of infrastructures.

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## Possible incidents and requests - What can happen?

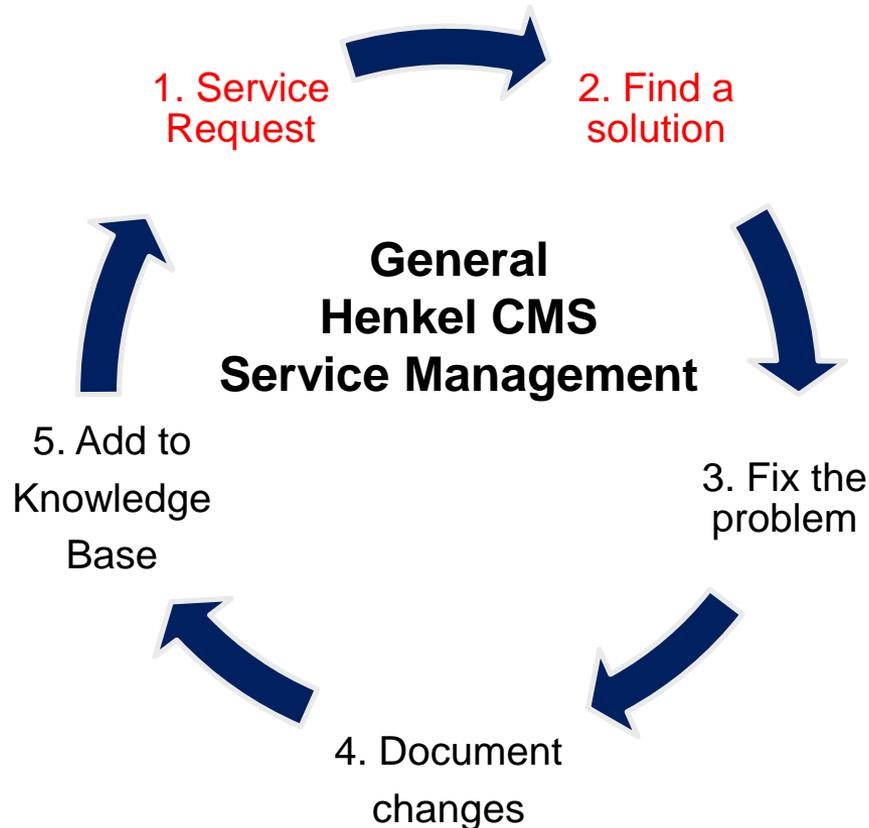
### ▪ Operational requests

- Application updates
- OS updates
- Hardware updates
- Rollout of new projects
- User administration
- Regular security checks
- Regular maintenance

### ▪ Trouble raised incidents

- User support
- Application failures
- OS failures
- Hardware failures
- Networking failures
- Configuration failures
- Excessive load
- Security incidents
- Bugs caused by service provider
- Bugs caused by software vendor

# Successful operating of RedDot infrastructures A service process adopted to ITIL\*



\*ITIL = IT Infrastructure Library

## ■ Involved sub-processes

### ■ Incident Management

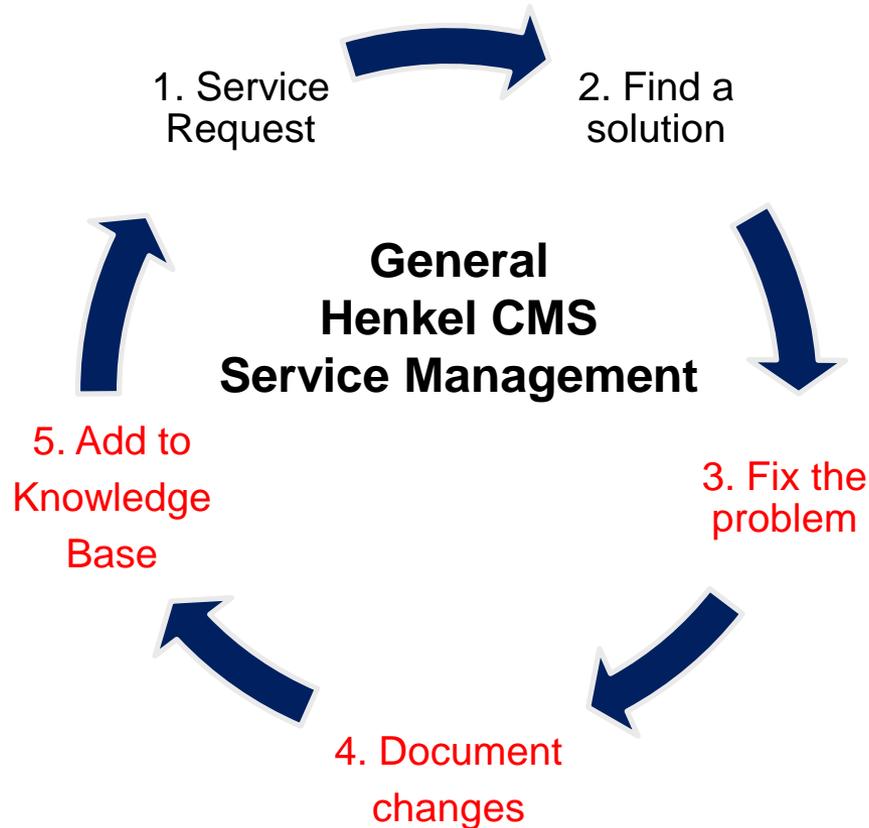
- Records, prioritizes and handles incidents. Finds solutions for known or simple incidents. Can create request for change (RFC) or escalate grave errors to problem management.

### ■ Problem Management

- Handling and error control of serious or new incidents, finding solutions by identifying underlying reason, creates RFCs.

The target of problem management is the stabilization of CMS-services and the minimization of incidents.

# Successful operating of RedDot infrastructures A service process adopted to ITIL



- Involved sub-processes
  - Change Management
    - Checks the completeness of RFC, and schedules the implementation.
  - Configuration Management
    - Checks the correctness of RFC, plans and schedules the implementation and prevents side effects.
  - Release Management
    - Executes the build, test and implementation of RFCs. Documents and communicates the results.

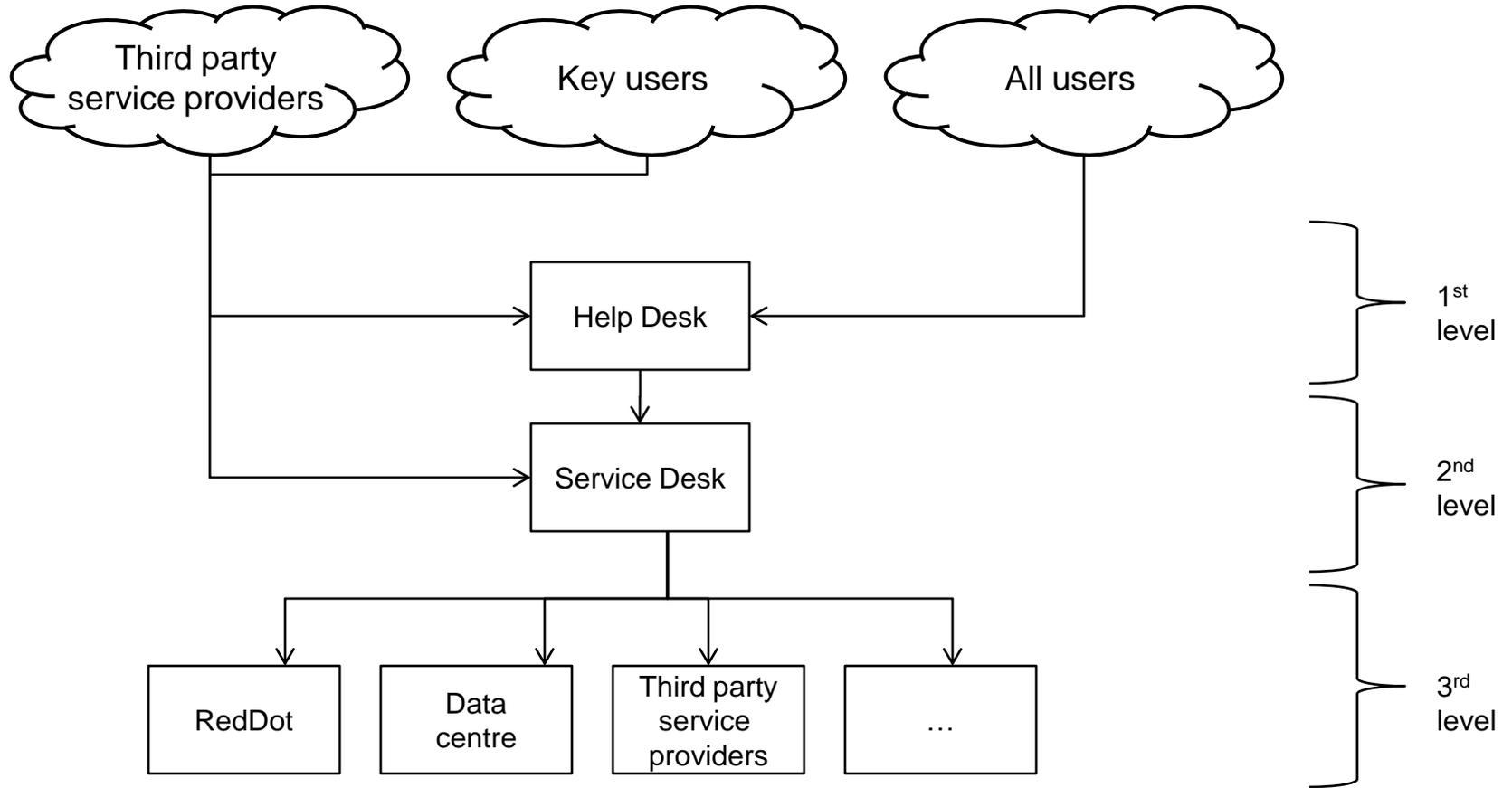
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# Communication causes collaboration

- **Everybody has to be on speaking terms!**
  - Editors have to talk to administrators und service members
  - Die administrators have to talk to service members and developers
  - Developers have to talk to creative people
  - Creative people have to talk to editors
  
- **Communicating people...**
  - ... realize problems.
  - ... uncover operative risks.
  - ... indentify requirements.
  - ... fix knowledge gaps.

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## Simple communication lines



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## Regular Meetings

*The following meetings should be planned bindingly :*

- **“Status of current problems and incidents”**  
Technical responsible persons, service desk and third party experts if necessary  
(e.g. every two weeks)
- **“Operative maintenance and risk management”**  
Technical responsible persons and service desk (monthly)
- **“Information to a specific incident and review”**  
Concerned parties and service desk (if necessary)
- **“Ongoing changes with and new solutions”**  
All parties working with the CMS beside simple editors (every six months)

# Successful operating of RedDot infrastructures Knowledge Management- Where does all the wisdom end?

- **Documentation is essential.**  
**You have to be well informed to solve or avoid problems!**
- To improve the service and support processes it is necessary to build up a central knowledge base, where configurations and solutions concerning the RedDot infrastructure are stored:
  - Central system documentation (continuously maintained)
  - Known bugs and defects
  - Known incompatibilities
  - Step-by-Step instructions
  - Best-Practice guidance
  - Short descriptions of existing solutions to avoid reimplementation
  - Responsibilities and competences

# Successful operating of RedDot infrastructures Knowledge Management - Where does all the wisdom end?

- **The knowledge base has to be easily accessible for everybody who is part of service and support processes as:**
  - Service Desk
  - Involved third party service providers
  - Responsible IT members
  - Editors

# Successful operating of RedDot infrastructures

## Taking care for the systems

**Successful system operating is an active process,  
Servers do not run for their own!**

- Reasonable system setup
- Continuous Monitoring
- Regular maintainance
- Security checks
- Backup
- Antivirus protection
- ...

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## Reasonable system setup

In most cases a multilevel system environment is necessary.

Development

- For development only!
- Not used for any tests.

Test

- For tests only!
- No development allowed.

Live

- Separated for development- and test-environment!
- For released software and configurations changes only.

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# Continuous monitoring of all systems

- **Problems should be uncovered before they catch someone's eye.**
- **What should be monitored?**
  - Capacity utilization of all concerned systems
  - Number of hits
  - HTTP-Accesses to webservers
  - Access-Logs
  - Error-Logs
  - Event-Logs
  - Backups
  - Network traffic and firewall (IDS/IPS)

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# Continuous monitoring of all systems

- How should systems be monitored?
  - Automate monitoring whenever possible!
    - Agent-basierte Tools
    - SMNP
    - SMNP-Traps
    - Syslog-Server
  - Manual monitoring- if not avoidable
    - At a particular date and time
    - Binding responsibilities
    - Documentation of results

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## Regular maintaincance of all systems

- **Maintainance shopuld be automated if possible, too..**
- What should be done?
  - OS updates
  - Application updates
  - Preventive replacement of hardware components
  - Log-Rotation
  - Defragmentation
  - Deletion of not needed data
  - Stress-Tests
  - Security-Scans
- Servers do not get better with the years, they get old.
- **The saying „Never touch a running system“ can lead to desaster!**

# intensive

## Conclusion

- **Successful operating of RedDot infrastructures**
  - is possible
  - makes many organisational arrangements necessary.
- **These Arrangements**
  - cause costs.
  - cause efforts.
- **At the end of the day**
  - RedDot is just another complex IT-system in your infrastructure.
  - You just have to treat it as your other complex IT-systems!

# intensive

## Conclusion

- Take care for
  - Clear responsibilities and competences
  - Defined processes
  - Professional Tools
  - A good documentation, which can be accessed by the concerned people

**➔ Nothing new –  
but ignored for RedDot-systems!**

# Successful operating of RedDot infrastructures

The time of RedDot servers underneath your desk are over!

## Thank you for your attention!

## → Questions?