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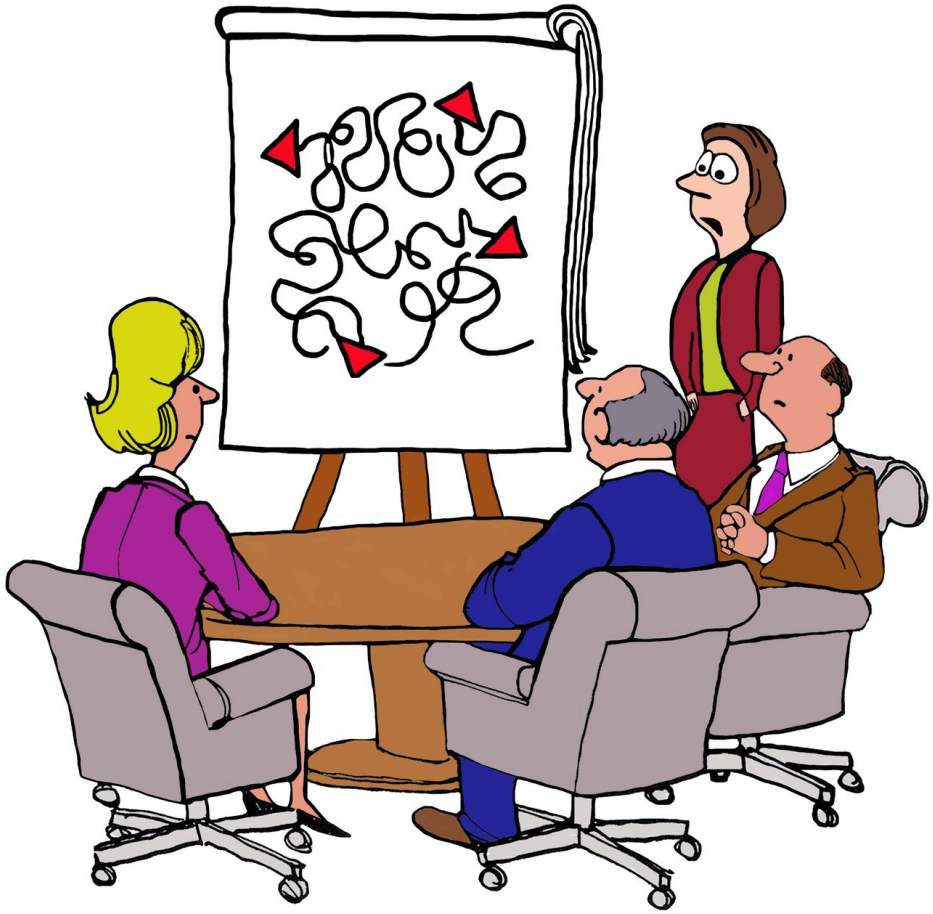
Roadmap

Plans and Ideas for the future

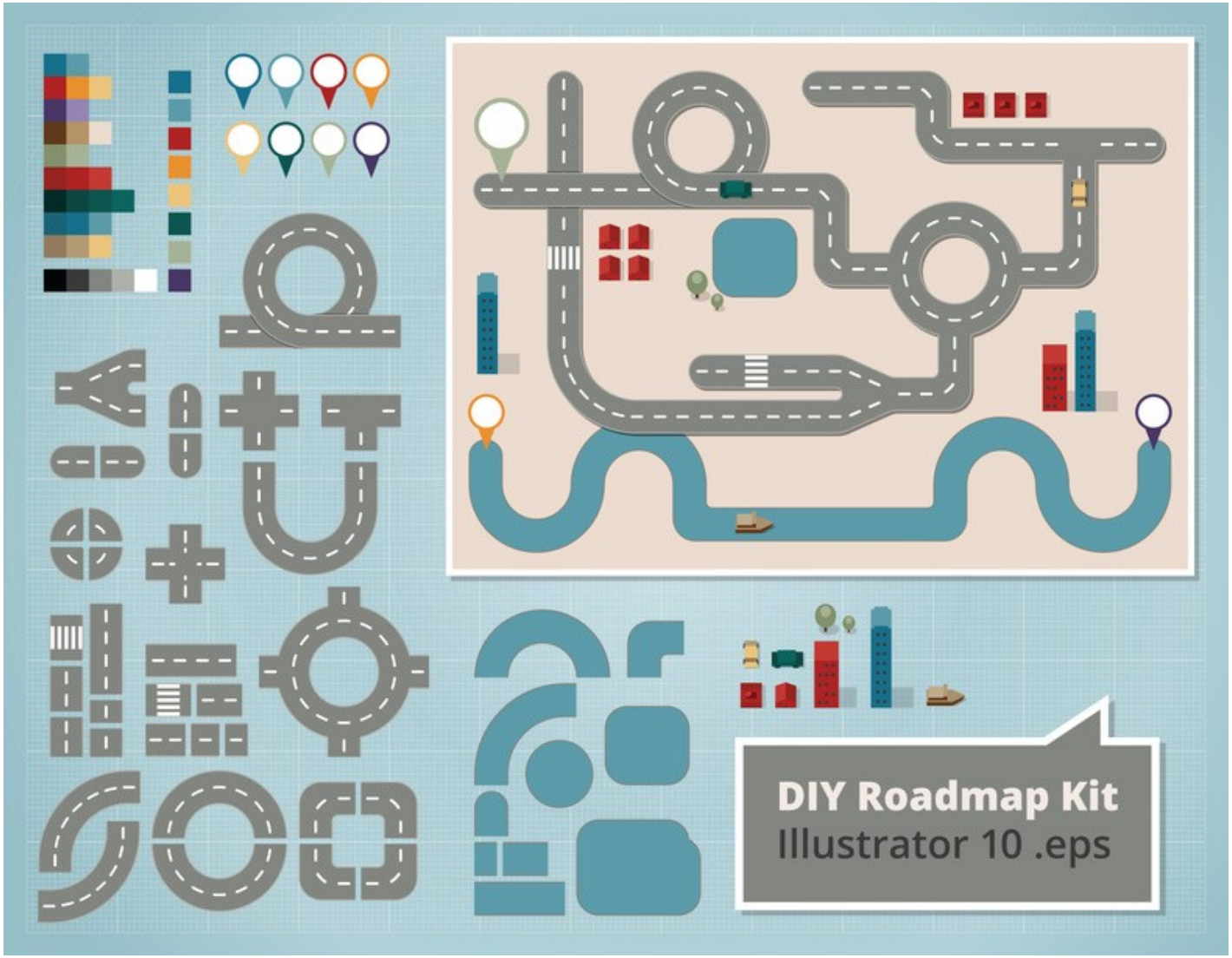
Mathias Kettner & Lars Michelsen

Our Roadmap



"The way forward is clear."

Our Roadmap (2nd try)



Our roadmap is created by you

Actual demands of customers
have precedence
over our own bright ideas!

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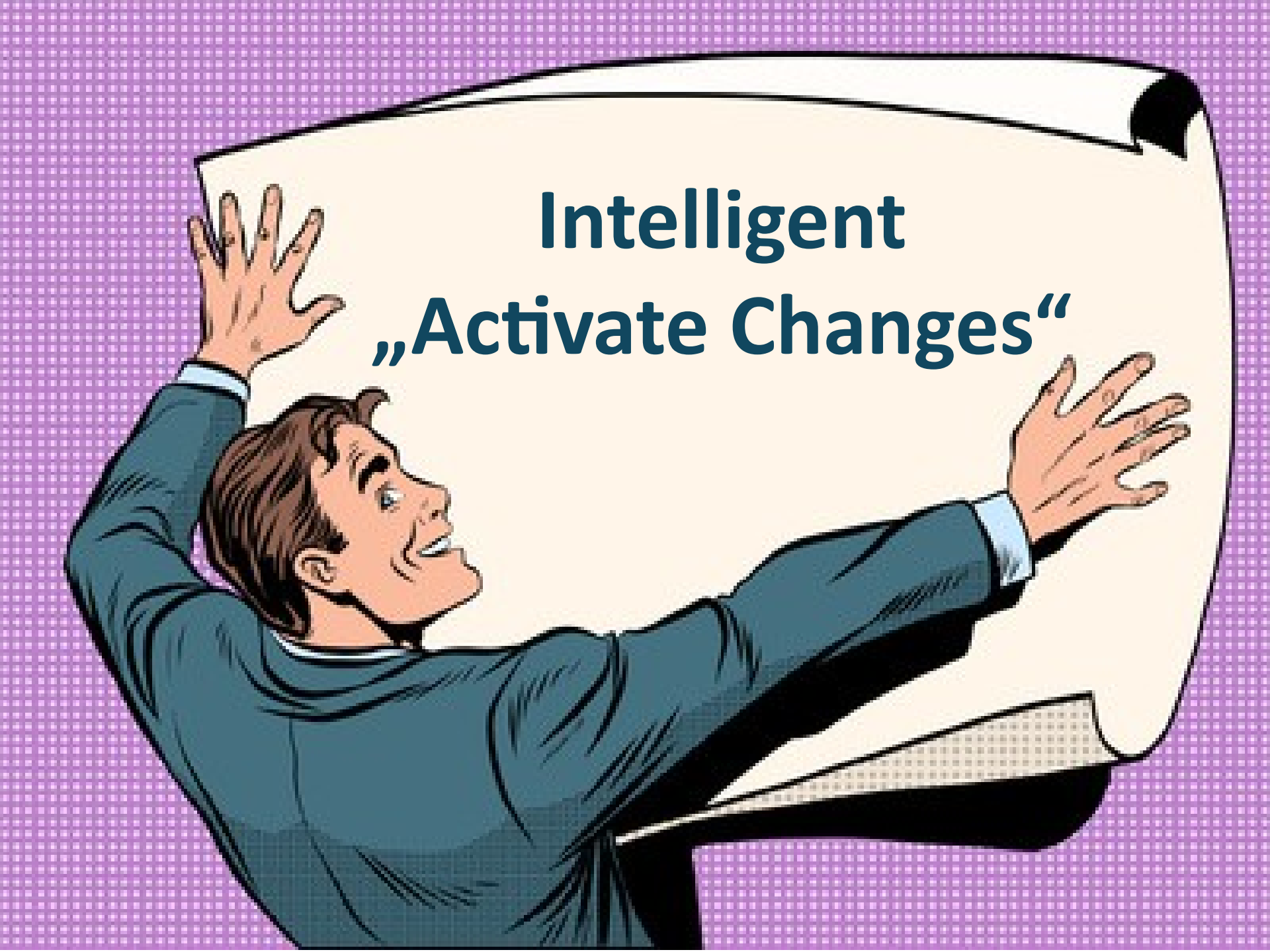
Already commissioned

THIS WILL COME FOR SURE

Intelligent „Activate Changes“



Current problem with „Activate Changes“

- You cannot activate just **your** changes
- You cannot undo just your changes
- You cannot undo selected changes anyway

Another problem with changes

- Some things get immediately active, some not
- Local site behaves differently
- Restart of monitoring implicitely activates some changes

Why **do** we need
to activate changes
in the first place??

Advantages of „Activate Changes“

- Control the exact **time** when a set of changes gets active
- Chance to review changes and maybe roll back

New concept

- Selected changes can be activated while keeping others pending
- Selected changes can be rolled back while keeping others

Sounds easy?

Example 1:

1. Create a folder
2. Create a host in that folder
3. Roll back Change 1

→ Changes depend on each other!

Example 2:

1. Delete host myserver123
2. Create (new) host myserver123
3. Rollback change 1

→ **Rollback of 1 would create invalid configuration with duplicate host!**

Example 3:

1. Delete a rule
2. Roll back change 1

→ **Changes need knowledge about the previous situation**

Example 4:

1. Delete host myserver123
2. Create (new) host myserver123
3. Rollback change 1

→ **Rollback of 1 would create invalid configuration with duplicate host!**

Implementation (1)

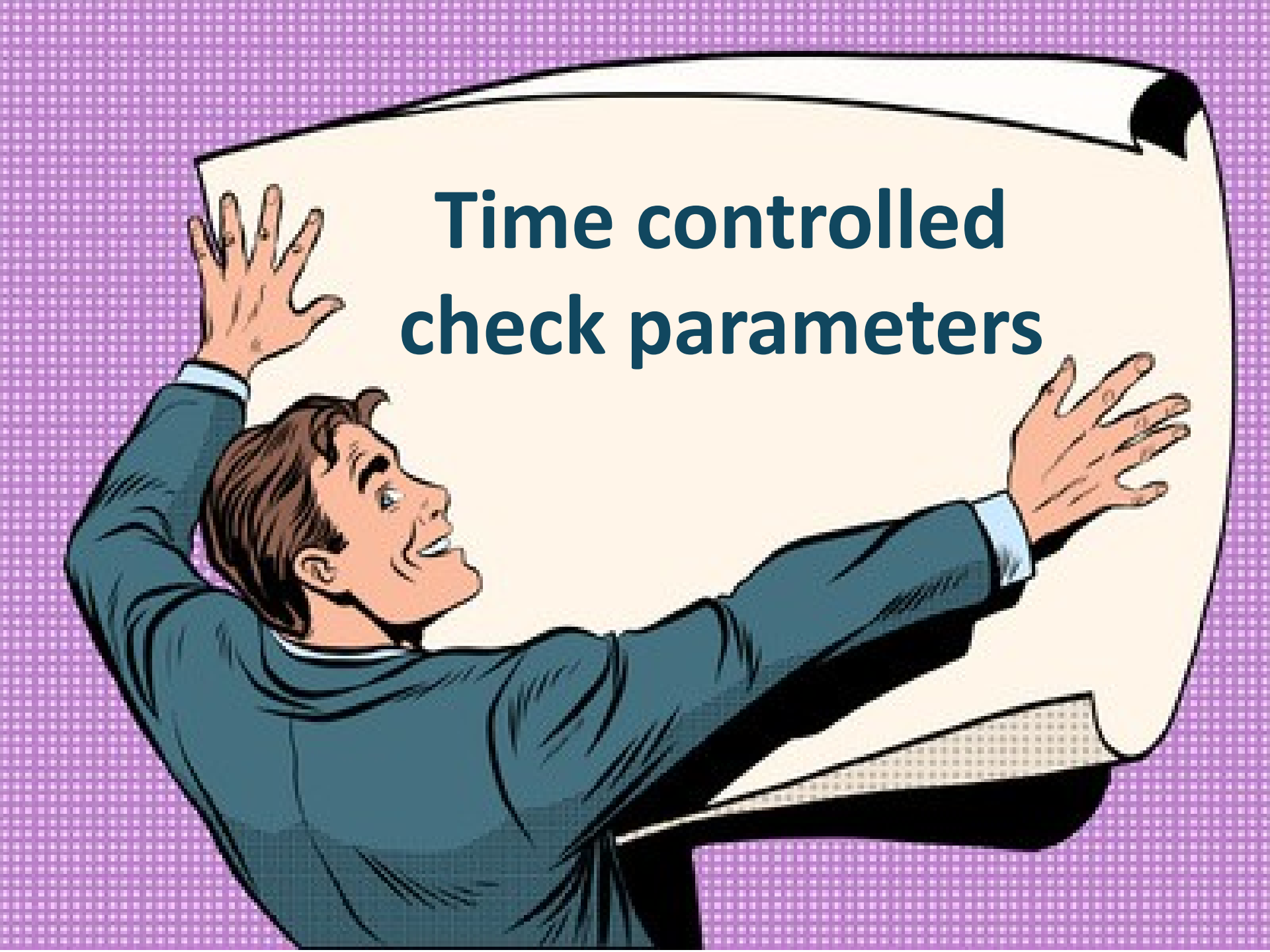
- Each change is an (intelligent) object that can apply / rollback itself
- And it can be saved / loaded on disk.
- Changes know about dependencies to other changes

Implementation (2)

- WATO will be reorganized interally so that everything it does is such a change.

WATO Web-API is the lucky guy

- Due to this formalization of changes **every** WATO operation will be available via the API


Time controlled
check parameters

Check parameters

- Changing parameters based on time
- Can be used with all Check_MK checks

  → „Parameters for discovered services“
- Transparent for checks

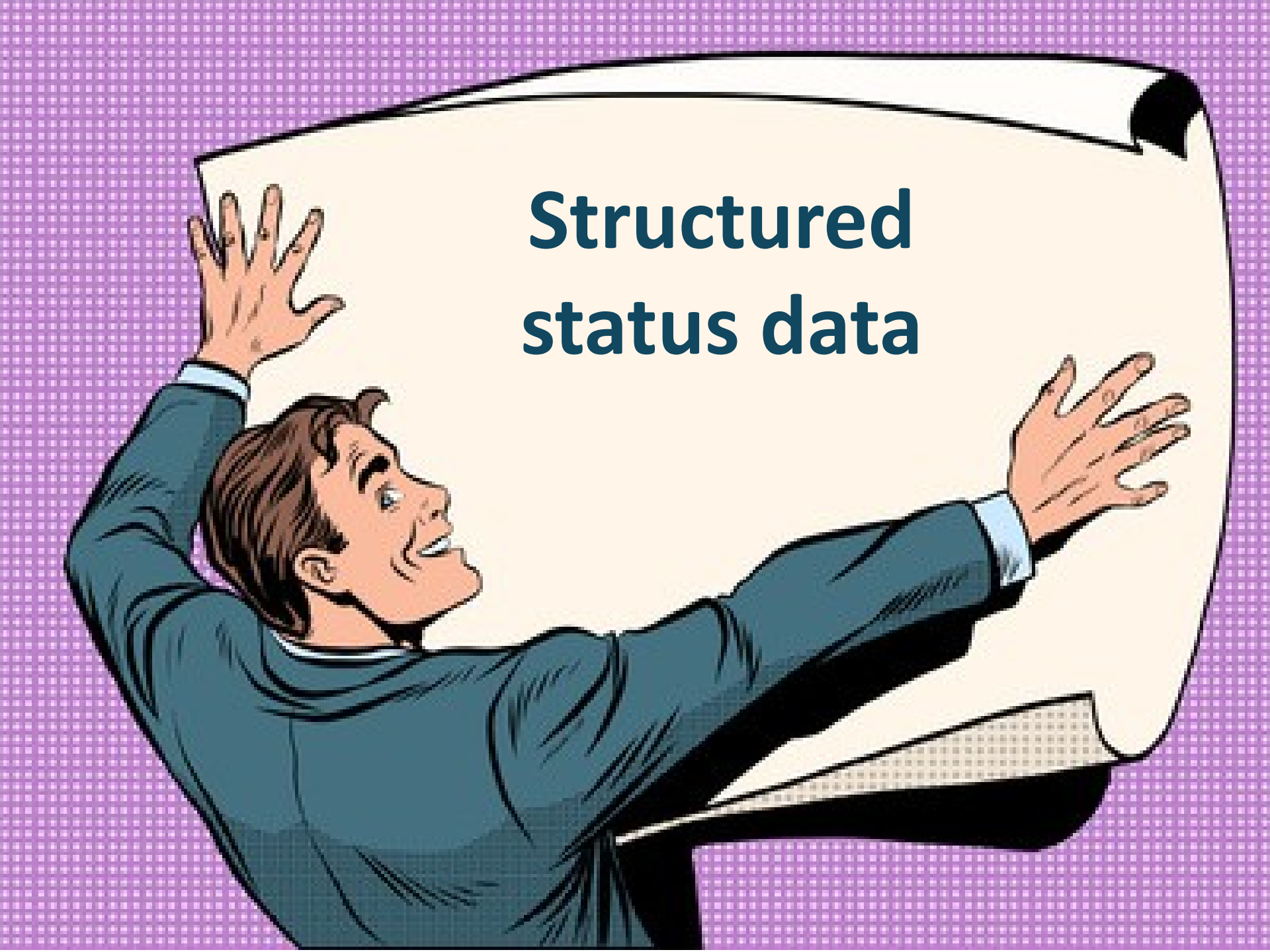
  → Check gets the current paramters

How to specify the time?

- We are using time periods
- Problem:

  Only admins can configure time periods
- Solution:

  Make them configurable by users


Structured
status data

Make checks produce more useful data

- We caputre a lot of data
- Why not make it better usable?
- Example:
  - Export current database usage together with database inventory information

Status Quo

- Checks: Status code, text, perfdata
- HW/SW-Inventory: Structured data

OK	CPU load		OK - 15 min load 0.32 at 8 Cores (0.04
OK	CPU utilization		OK - user: 2.7%, system: 0.6%, wait: 0
OK	CUPS Queue officejet-daniel		OK - is idle. enabled sinc
OK	CUPS Queue officejet-diana		OK - is idle. enabled sinc
OK	Disk IO SUMMARY		OK - Utilization: 0.0%, Re Average Read Wait: 0.00 Queue Length: 0.00

vs.

Hardware

▼ Arbeitsspeicher (RAM)

Gesamter Auslagerungsspeicher	15.88 GB
Gesamter verfügbarer Arbeitsspeicher	15.55 GB
Virtuelle Adressraum für Mappings	31.00 TB

Netzwerk

Hostname	Klappspaten
Ports	1
Schnittstellen	3
Verfügbare Ports	0

▶ Schnittstellen

Extend HW/SW inventory?

- Status data is captured often
- Data can change each interval

→ Conflict with HW/SW inventory history (differential mode)

How to?

- New check function „data_function“
  - Extends a tree with own data

- Status GUI: Merges both trees
- Export merges data optionally

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Plans

WE PROBABLY WILL DO THIS

Tickets via GUI

Make ticketing less painfull

- Takes time: Collecting needed information
  - Meta data (OS, Check_MK version, ...)
  - Mandatory diagnose information

- Could be improved with some kind of guided ticket creation

GUI Integration

- Add a ticket creation module
- Dynamic form with mandatory fields based on categories
- Components: Core, GUI, Event Console, ...
- Categories: Bug, Configuration problem, Performance, Development

Example: Check development request

- Ask all common questions
  - What to monitor?
  - How to get data?
  - Provide MIBs
  - WATO configuration needed?
  - Metrics needed?
  - …?

Performance

Check_MK Check Helper Memory

- Get deeper understanding
  - Need real environments for this
  - Measure
- Possibly change helper model

Improve Livestatus Proxy scaling

- We need more than 300 sites
- Limits:
  - Number of file descriptors, Python GIL
- Change to multi process architecture

Apache / GUI

- A lot of load is caused by inactive sessions (hidden tabs / windows)
- Disable update while inactive
- Restart the update again when focused

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Ideas and Dreams

MIGHT OR MIGHT NOT COME TRUE

SLAs

Current functionality:

Host	Service	OK	WARN	CRIT	UNKNOWN
Lastrechner	Filesystem /	83.52%	16.30%	0.16%	0.00%
Lastrechner	Filesystem /bauwelt	95.15%	0.87%	3.97%	0.00%
Lastrechner	Filesystem /chroots	99.44%	0.18%	0.37%	0.00%
Lastrechner	Filesystem /boot	99.99%	0.00%	0.00%	0.00%
Lastrechner	Filesystem /opt/omd	95.61%	4.15%	0.22%	0.00%
Summary		**94.74%**	**4.30%**	**0.94%**	**0.00%**

- Precise analysis of actual availability
- Many ways to tune computation
- Also for BI aggregations
- Simplistic „SLA“-Check, just coloring cells according to percentages

Real SLA can be much more complex.

Idea - step 1:

- New GUI module for specifying more complex SLAs
  - Based on different timeperiods
  - Also number, length of outages
  - expandable in a modular way
- Edited by users just like views and reports.

Idea - step 2:

- Assign these SLAs to hosts and services via rules
- Assign to BI aggregates via BI module

Idea - step 3:

- View have new optional columns for showing SLA status
- Not only yes / no, but also **amount** of (under-)fullfillment
- Also available in the **current** time period.

Idea - step 4:

- Actual SLA-**Monitoring**
- E.g. gets you warned if your **allowed** downtime for the current period is running low.
- Helps you fullfulling your SLAs!
- Helps you planning downtimes.

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Thanks for listening!

YOUR FEEDBACK IS WELCOME