Update intervals

 15 minutes 44

Retrieve a new value for this item every N seconds:

- Minimum update interval is 1 second
- Maximum allowed update interval is 1 day
- Time suffixes are supported, e.g., 30s, 1m, 2h, 1d
- A user macro can be used in this field
- Defaults to seconds if a suffix is not used (600 = 10m)
- Can be set to 0 (never checked) if a custom interval exists with a non-zero value

Update interval cannot be set for the following item types:

- Zabbix trapper
- SNMP trapper
- Dependent items

Update interval specifies the time between item checks:

- ⌁ All checks are distributed equally over time
- ⌁ This design is implemented to avoid data collection spikes

Two items have the same update interval 10 seconds:

- ⌁ Incoming traffic is monitored every 04, 14, 24, 34, 44, 54 second
- ⌁ Outgoing traffic is monitored every 00, 10, 20, 30, 40, 50 second
- ⌁ The next item will have different timings
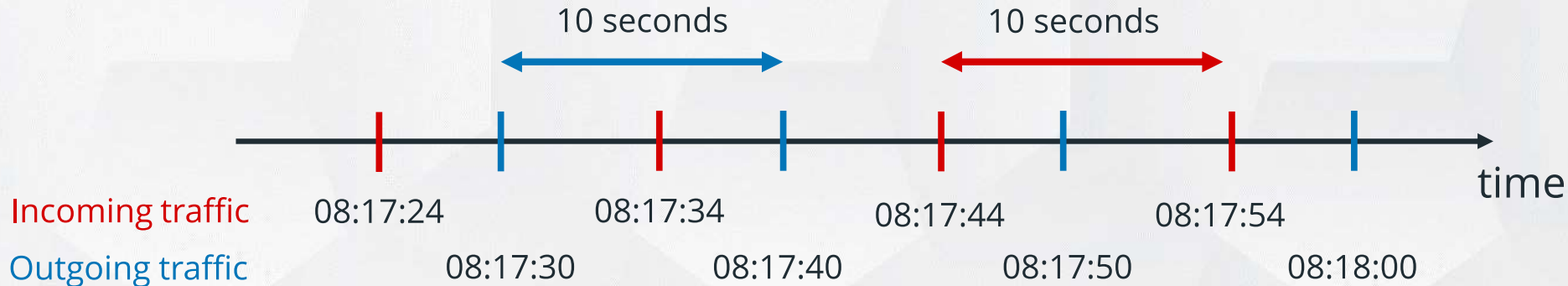
Timestamp	Interface eth0: Incoming traffic	Interface eth0: Outgoing traffic
2021-09-07 08:18:00		1704
2021-09-07 08:17:54	639	
2021-09-07 08:17:50		1427
2021-09-07 08:17:44	809	
2021-09-07 08:17:40		1710
2021-09-07 08:17:34	436	
2021-09-07 08:17:30		1006
2021-09-07 08:17:24	686	

10 seconds   10 seconds

Incoming traffic   08:17:24   08:17:34   08:17:44   08:17:54
Outgoing traffic   08:17:30   08:17:40   08:17:50   08:18:00

time

Flexible intervals allow to redefine the default update interval for specific time periods:

- Interval   the update interval for the specified time period
- Period   the time period when the flexible interval is active

Multiple flexible intervals can be defined:

- Outside the flexible intervals the default update interval is used.
- If multiple intervals overlap, the smallest interval value is used for the overlapping period
- If the flexible interval is set to '0', the item is not polled during the flexible interval

* Update interval	1m			
Custom intervals	**Type**	**Interval**	**Period**	**Action**
	Flexible Scheduling	10m	6-7,00:00-24:00	Remove
	Add			

⚠   `Zabbix server time zone is used to specify flexible intervals`

Scheduling intervals are used to additionally check items at specific times:
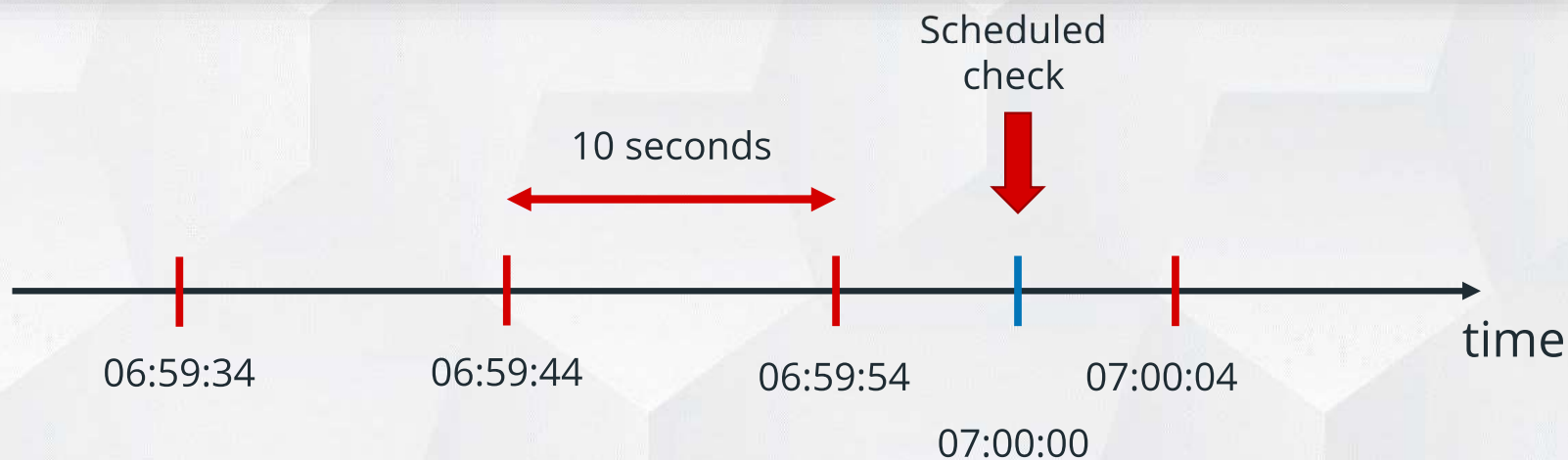
- ⟳ Independent checking schedule, which is executed in parallel to "Update interval" checks
- ⟳ If update interval is set to 0, only scheduled checks will be executed
- ⟳ Zabbix server time zone is used

* Update interval	10s			
Custom intervals	Type	Interval	Period	Action
	Flexible Scheduling	wd1-5h7		Remove
	Add			

Scheduled check

10 seconds

06:59:34   06:59:44   06:59:54   07:00:04   time

07:00:00

A scheduling interval is defined as:

- md<filter>wd<filter>h<filter>m<filter>s<filter>
  - ✓ md   month days   1-31
  - ✓ wd   week days   1-7
  - ✓ h   hours   0-23
  - ✓ m   minutes   0-59
  - ✓ s   seconds   0-59
- <filter> is defined as: [<from>[-<to>]][/<step>]
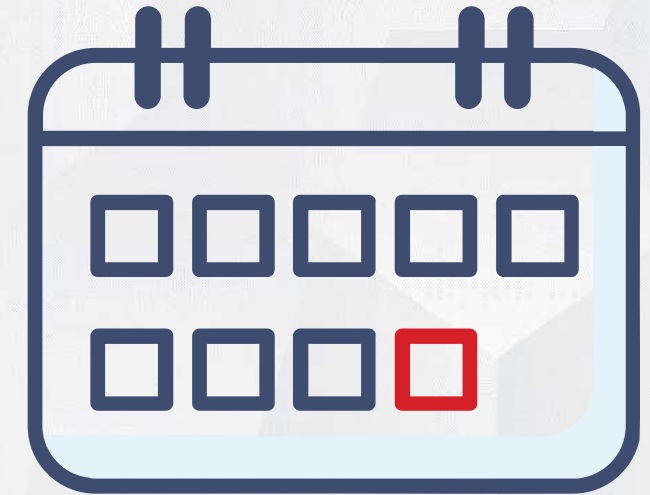
Examples:

- wd1-5h9 - every Monday till Friday at 9:00

- h9m/30;h10 - execute at 9:00, 9:30, 10:00

- h9-10m10-40/30 - execute at 9:10, 9:40, 10:10, 10:40

- md1wd1h9m30 - every 1st day of each month at 9:30 if it is Monday

⚠ `Massive use of scheduled items can cause big spikes on monitored environment!`

Custom intervals can be used:

- For all passive checks
- As active checks only for Zabbix agent 2

Update interval, flexible intervals and scheduled checks can be combined:

- Update interval 0 is supported only in the combination with Custom intervals
- Flexible intervals will override update interval
- Scheduled checks will be executed in addition to update/flexible intervals

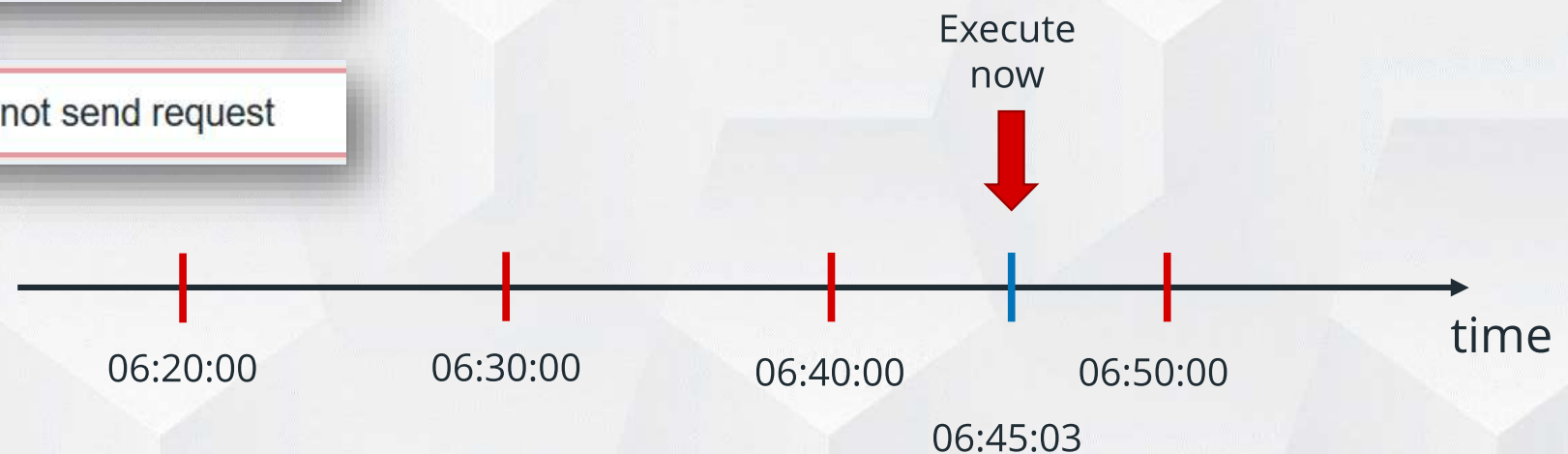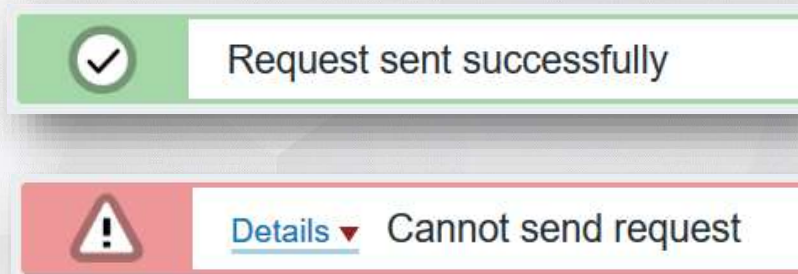Pressing [Execute now] will perform an extra item check on demand:

- ⌁ The actual data collection may be slightly delayed (a few seconds) after pressing the button
- ⌁ The value will be collected and processed as usual
- ⌁ Will work locally or through active/passive proxies
- ⌁ Can be executed for multiple items at once
- ⌁ Active items (Zabbix agent active, trapper, etc.) cannot be forcibly executed
- ⌁ Status of the execution request will be reported (This does not mean successful execution!)

✓ Request sent successfully

⚠ Details ▾ Cannot send request

Execute now

06:20:00   06:30:00   06:40:00   06:50:00   time

06:45:03

PRACTICAL SETUP

1) Define flexible update intervals for the CPU load item
   - ✓ Nighttime (00:00 - 06:00)   once per minute
   - ✓ Weekends (Saturday, Sunday)   once per 5 minutes

2) Create a new item to monitor swapped in pages with scheduled interval
   - ✓ Once per hour exactly at the beginning of the hour