Notifications of overloads of servers, computers and the course of their load with up to two-month history can be acquired from Watches. In this article, we'll advise you how to configure monitoring with notification from usage of CPU, RAM and load of disks.

Recommendation : If you haven't worked with C-Monitor console yet, then read the Introduction to setup of Watches, conditions, actions [1]

Skip to Example of setup of overload monitoring through CM portal (for all OS types) Skip to View of the current state and history of overloads on CM portal

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Example of setup of overload monitoring through C-Monitor Console on Windows

Create a watch to check Server overload. Select Memory usage as the first condition.					
Watch Wizard					
Add condition for "	Preťaženie servera"				
Performance Memory usage CPU usage Disk usage Disk read / write queue length Network adapter usage Process usage (memory, CPU) Performance counters Transfered speed in LAN, Harddrives	Health of systems EventLog Events Count (for Windows Vista and newer) Free space on disk. Service status Loaded Device Driver Running process E-Mail looping test (SMTP -> POP3) Ping RTT (response time) Ping packet loss	Security Running user process Unauthorized admin process LoggedOn user Time limitations Date Day of Week Time Time Range 			
 Transfered speed of FTP Internet IP trafic (transfer speed) Internet IP transfered data Preddefined performance templates Check accessibility Ping SMTP POP3 HTTP, HTTPS Exists file Exists directory Accessible directory Current IP Network presented (active any network adapter) 	 File size File size in directory Windows running time Hardware Monitoring HW monitoring of server (HP, DELL, FUJITSU) LINUX monitoring Environment Monitoring (snmp) Environment Monitoring (http) Preddefined health templates 	Custom conditions SNMP CHAT CHAT Variable CHAT Numeric Variable CHAT Vector Variable Use state of another Watch Watch state			
< Back Next >		Cancel			

Image: Pridanie memory usage

in Memory type, choose Total memory usage, set the operator to < and the value to 99%. The high value is selected, as we expect that in a normal state, the usage of RAM shouldn't be high. Set the



value of change (If value changes more than) to e.g. 2-5%. Each value that reaches a change by the selected number of percent is sent to the CM server. As the server should not be unnecessarily loaded, it's appropriate to choose a higher number, but in a way, that the view on CM portal shows relevant changes of the monitored parameter.

Memory usage

Memory Typ Used Total	e I Memory Size		•		
Operator ≺ ▼	Memory Size 99	Unit %	•		
Value fro If value Always Never	o m this conditio e changes more th	n send to an 2	o CM s	erver %	
🗖 Assess t	he state of watch				

Image: Parametre pre Memory usage

Click on Next and then on Add condition, where you select CPU usage. In the next window set the operator to < and the value to 99%. The high value is selected, as we expect that in a normal state, the usage of CPU shouldn't be high. Set the value of change (If value changes more than) to e.g. 2%. Each value that reaches a change by the selected number of percent is sent to the CM server. As the server should not be unnecessarily loaded, it's appropriate to choose a higher number, but in a way, that the view on CM portal shows relevant changes of the monitored parameter.

CPU Usage

CPU Usage System	Operati	or T	Usage in % 99]
 ✓alue from this c ● If value changes ○ Always ○ Never 	ondition s more than	end 2	to CM server	
Assess the state o	f watch			



Image: Parametre pre CPU usage

Press Next and add the condition Disk Usage. In the next window set the operator to < and the value to 95%. The high value is selected, as we expect that in a normal state, the disk usage shouldn't be high. Set the value of change to e.g. 5%. Each value that reaches a change by the selected number of percent is sent to the CM server. As the server should not be unnecessarily loaded, it's appropriate to choose a higher number, but in a way, that the view on CM portal shows relevant changes of the monitored parameter.

Disk Usage

Operator Usage in % ▼ 95	
Value from this condition se	end to CM server
If value changes more than	5
Always	
🔘 Never	
Assess the state of watch	

Image: Parametre pre Disk usage

After the conditions are entered, it's advisable to tick Delay for False. The Delay for sending notifications is set, so that not every bigger load of the server is notified as a False state. It's likely, that the server sometimes uses maximum of the hardware resources, e.g. when working with a huge amount of files, at execution of certain programs etc. However, this state should not last too long. Set the length of the delay for sending notifications in respect to the running processes, as well as usage of the server itself.

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	au		112	alu

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C	onditions for "Preťaženie servera"					
1	Used Total Memory Size < 99% Check on each watch state evaluation Value will be sent to CM Server only if change to last sent value is more than 2					
2	CPU Usage System < 99% Check on each watch state evaluation Value will be sent to CM Server only if change to last sent value is more than 2					
3	Disk Usage < 95% Check on each watch state evaluation Value will be sent to CM Server only if change to last sent value is more than 5					
A	Add Condition Edit Condition Delete Condition					
gate (of watch is OK if all conditions are true FAIL · if at least one condition is false					
🔽 De	alay for FAIL state. Conditions for FAIL state must be met at least					
Sho	ow Advanced Options					
Note:	Note: Watches are active from 5 min after the operating system start					
< B	Back Next > Skip Actions >> Cancel					

Image: Podmienky watchu preťaženia servera

After pressing Finish, the watch's configuration is complete. If you select the watch as Enabled, you'll be able to view its status directly in the PC's C-Monitor console, in the top left menu watches state.

Example of setup of overload monitoring through CM portal (for all OS types)

A watch can be created even without direct access to the PC, by adding it though CM portal. After login to CM portal, open Admin zone and in the left menu Watches - Settings. Enter parameters of the required computer into the upper filter. After finding it, you'll see the PC/server along with its already existing watches, if there are any. After clicking on Display watches, you'll get to the option



Signalization of overload via Watches

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	1 Admin zóna	Prehliadanie a Vyhodnotenie	Customer	Desk							C
- Zoalit vieto 👘 Rochalit vieto	🔘 Watches -	nastavenia									
Hlavné mesu	Spoločnosť seal	Počitač & Umiestne	mie 6330	Použivateľ	Operátor	Hladat	· Jednoduché				Envious
Zákaznici Počítače	Nazov Watchu	Len zapnuté W	atches 🗆 Len on	áne politale			O Mazsirene				Instantia
Audit SW a evidencia HW	X CHID Harow	cieti Umiesteonia	Deviluated	Incidence		Matchas		Abrulian	Hancel	Real option	on solected hus
Poulivateña	X CHI-D MENOV	seu onesonne	POLIVER	showcards		Watches		na PC	odoslané welches z	spojenie s CM	3
tiláj proti Zákaznicke kontá Poudivateľská história	SC#4012 1#4830P	prenoany BA	Pavel	SEAL IT Services, a.r.o.				Ana	PC do CM 10. Apr 2012 10:00:04	10. Apr 2012 10:27:18	Display wolches SWL history
Admin. nástroje	< 1/1 > 20	💌 Zobrazujem po	lažky 1 - 1 z celkovéř	no počtu 1 položiek							
inštalácie a skripty C-Image nastavenie Udzbavanie PC											
- C-Monitor Mient											
Nastavenia C-Nontora na PC Robrity a stav čiteti Wotrites - nastavenia Advalizička C-Nontor kilenta Verde Licencie Statnuté súbory z počilačov	2										

Image: Pridanie watchu cez CM portál

Click on Add watch to start creating a new watch

💟 Watches - nastavenia										
Spoločnosť Názov Watchu	seal	Počitač & Umiestnenie	6930 ra 🔲 Len onli	Použivateř ne počítače	Operátor	Hfadat	 Jednodu Rozšíren 	ché é		Previous Watches
Zoznam watches odosielaných z počítača SEANB02/HP6930P/Pavol / prenosny BA Pridanie watchu Add watch Book										
	Watch name	State		0	onditions		Min. change value	Delay for FAILED state	Start / Repeat / End actions	
< 1/1 -	< 1/1 × > 20 × Zobrazujem položiv 1 - 0 z celkového počiu 0 položiek									

Image: Pridanie Watchu

Name the watch e.g. Server Overload in the popped-up window. It's advisable to tick Delay for False. The Delay for sending notifications is set, so that not every bigger load of the server is notified as a False state. It's likely, that the server sometimes uses maximum of the hardware resources, e.g. when working with a huge amount of files, at execution of certain programs etc. However, this state should not last too long. Set the length of the delay for sending notifications in respect to the running processes, as well as usage of the server itself. Then press Continue.

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Signalization of overload via Watches

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New watch	_ 🗆 🙁
Name (Description) Short Name	Pret'aženia servera 1
Enabled	
Watch state	OK if all conditions are true FAIL if at least one condition is false
Notify Unknown State from C-Monitor by Watch actions	
Notify Unknown State from CM server	Notification can be enabled after updating watch on the computer
Delay for FAIL state	Conditions must be met at least 10 min 💌
Evaluation and notification of errors on CM server:	For this watch: ALLOWED on CM server Notification is enabled
	For computer: ALLOWED (Change in computer settings)
	For customer: ALLOWED (Change in customer settings)
IMPORTANT NOTE: No modificat only by sending the modified con	ions during editing of the watch are saved to the database. Watch configuration is updated infiguration to the C-Monitor client.
	3> 💾 Continue

Image: Pomenovanie watchu, nastavenie

The tab Condition & Actions will open, and by pressing Add condition, you'll add the first condition for monitoring of RAM usage, i.e. select Memory usage from the list. In Memory type, select Used Total memory size, set the operator to < and the value of Memory size to 99%. The high value is selected, as we expect that in a normal state, the usage of RAM shouldn't be high. Set the value of change (If value changes more than) to e.g. 2%. Each value that reaches a change by the selected number of percent is sent to the CM server. As the server should not be unnecessarily loaded, it's appropriate to choose a higher number, but in a way, that the view on CM portal shows relevant changes of the monitored parameter. Then press Apply.



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	Admin zóna Prehliadanie Vyhodnoteni	a Customer Desk		Operátor: Pavol Paákeesič
Zbalit vlako 🔹 Rosbalit vlako	🕲 Watches - nastavenia			
Havné menu Zákazníci	Spoločnosť srol Počitač & Umie Názov Watchu 🗌 Len zapru	etnenie 6330 Poulivateř té Watches 🗌 Len online počítače	Operátor Hifodot 🔍 Jednoduché 🔿 Rozlávné	Previous Watches
Počítače Audit SilV a evidencia HW	Preťaženia servera (SEANB02)	Bová podmienka pre watch	_ f	🛛 🔕 🗶 Defete 😂 Update Back
- Použivatelia	General Conditions & Actions	Filter:	Memory Usage	
Mőj profil Zákaznícke kontá	Description Add condition	CHAT Numeric Variable CHAT Variable CHAT Vector Variable CPU Usace	Used Total Memory Size	
Používateľská htetórta Admin, akstroja	List of Actions	Current IF Date Day of Week: Description	Value from this condition send to CAI server 4	
Inditatácie a stripty	Type Description	Dak Queue Length Dak Usage E-Hai Loop Test	If value changes more than 2 Avage Never	Detay
C-Image nastavene UddSavanie PC	Podmienka alebo akcia bola upravovaná s	Environment Monitoring (amp) EventLog Events Count EventLog Events Count EventLog Events Count		
C-Monitor klient Nastavenia C-Monitora na PC		File Sae in Dectory File Sae in Dectory Free Space On Dak		
Roowhy a star illoh Walches - pastavenia	IMPORTANT NOTE: No modifications durin configuration is updated only by sending the	HTTP.HTTPS Hardware Monitoring Internet IP Traffic		
Aktualizácia C-Monitor kilenta Vecte		Loaded Device Driver LoggerOn User	2	
Licencie Stiahnuté súbory z počítačov		Network Adapter Usage Network Presented Operating System started POP3		
- Komunikácia		Performance Counter -	6	
Odosłané pośładawky z CM			📔 Aplikavet 🤨 Zav	ier .

Image: Nastavenie podmienky pre sledovanie RAM

By another clicking on add condition, we'll similarily add a condition for usage of CPU. Select CPU usage from the list. In the next window, set the operator to < and the value to 95%. The high value is selected, as we expect that in a normal state, the usage of CPU shouldn't be high. Set the value of change (If value changes more than) to e.g. 5%. Each value that reaches a change by the selected number of percent is sent to the CM server. As the server should not be unnecessarily loaded, it's appropriate to choose a higher number, but in a way, that the view on CM portal shows relevant changes of the monitored parameter. Press Apply when the parameters are entered.

🔶 Preťaženia servera (SEANB02)			🗙 Delete 📚 Update Back
General Conditions & Actions	Bová podmienka pre watch	_ = 0	
List of conditions	Filter.	CPU Usage	
Description * Used Total Nemory Size > 95%, Value to Cilit, min, char Add condition	CHAT CHAT Numeric Variable CHAT Veriable CHAT Veriable CHAT Veriable CHAT Vector Vecto	CPU Usage Operator Usage in % System 35 Value from this condition send to CIII server	East Caleta
List of Actions Type Description Add action	Current IP Darke Dary of Week Directory Accessible Dirk Course Length Dirk Usage E-Mai Loop Test Environment Monitoring (http) Environment Monitoring (smp) **	If value changes more than 5 % Aways Never	Detay
Podmienka alebo akcia bola upravovana		🞽 Aplikovet 🛛 🤨 Zaviet	
IMPORTANT NOTE: No modifications du configuration is updated only by sending th	ring editing of the watch are sav the modified configuration to the C-M	ed to the database. Watch tomitor client.	

Image: Nastavenie podmienky pre sledovanie CPU

Finally add a condition for load of disks. Add the condition Disk Usage. In the next window, set the operator to < and the value to 95%. The high value is selected, as we expect that in a normal state, the usage of RAM shouldn't be high. Set the value of change to e.g. 5%. Each value that reaches a change by the selected number of percent is sent to the CM server. As the server should not be unnecessarily loaded, it's appropriate to choose a higher number, but in a way, that the view on CM portal shows relevant changes of the monitored parameter. Press Apply when the parameters are entered.



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O Nová podmienka pre watch		_ 🗆 😣
Filter:	Disk Usage	
CHAT CHAT Numeric Variable CHAT Variable CHAT Vector Variable CPU Usage Current IP Date Day of Week Directory Accessible Disk Queue Length Disk Usage E-Mail Loop Test Environment Monitoring (http) Environment Monitoring (snmp) EventLog Events Count Exists Directory Exists File File Size Elea Size in Directory	Operator Usage in % Value from this condition send to CM server If value changes more than 5 % Always Never	
	💾 Aplikovat') 😣	Zavrieť

Image: Nastavenie podmienky pre sledovanie diskov

When the conditions are entered, click on Update. After this step, you'll see two warning windows. In the first one, confirm sending of the watch to the PC/server.

🕲 Watches - nastavenia					
Spoločnosť soal Počitač & Umiestnenie 6930 Názov Watchu Ilen zapnuté Watches Ilen Ilen <td< th=""><th>Použivatef Operátor</th><th>Hfadat Sednoduché Rozářené</th><th colspan="3"></th></td<>	Použivatef Operátor	Hfadat Sednoduché Rozářené			
 Pretaženia servera (SEANB02) 			🗙 Delete 📚 Update Back		
General Conditions & Actions					
List of conditions	Are you sure to update changes on C-Monitor?				
Description					
* Used Total Memory Size > 95%; Value to CM, min. change 2 * CPU Usage System < 95%; Value to CM, min. change 5 * Disk Visage < 95%; Value to CM, min. change 5	OK Zrušiť		Edit Delete Edit Delete Edit Delete		
Add another					

Image: Upozornenie o update watchu

The second window contains a warning, that you shouldn't edit the watch until it's received on the PC/server

 Pretazenia servera (SEANB02)	🗙 Delete 😂 Update Back
General Conditions & A	Request to update watch has been sent to C-Monitor.	
List of conditions	Watch will be updated in few minutes, please do NOT edit watch until your changes will be applied on the computer.	
Description	Continue with redirecting to the list of watches.	
* Used Total Memory Size > 99%; Val		Edit Delete
* CPU Usage System < 95%; Value 1		Edit Delete
* Disk Usage < 95%; Value to CM: m	OK	Edit Delete
Add condition		

Image: Upozornenie 2

View of the current state and history of overloads on CM portal

The online status, as well as history can be viewed on CM portal at Presentation and Evaluation -> Watches (online monitoring), search either the computer or the specific Watch through the upper filter



Signalization of overload via Watches

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	Adm	in zóna	Prehliadanie a Vyhodnotenie	Customer	Desk						Operator: Pevol		C
Zoalit vleko – Pozbalit vleko	H	Watches (O	nline monitoring	3)									
Upozomenia Poruchy História porúch Poruchy sa požíteň	Społoćno Meno Wa Operátor	nt" sesi tchu	Počitač & Umiestnenie Current status Zotvaziť	6930 Pod sebou	Zoradiť podľa Zoradiť ako 🗷 Trae 🗹 Pa	Vootupne 💌	Zoradif Watche Zoradif Watche Vypruté wat	es podřa Raz es ako Vao tche 🗆 Len ori	dupre e II	ladat			
- Zobrarenia	Zoznam watches [zożnazenii 1 položia]								Report z porúch	Watches			
Zéry Viatohes (Online monitoring)	Stav	Mena	Hodnota		Posłodnà zmena stavu	Podmienky k un	čeniu stavu	CM-ID počítača	<u>Meno počitača v</u> <u>sieti</u>	Umiestnenie	Posi, er spojeni	nine e s CM	
Počítače Online Informácie Internet bandwidth monitor Zmeny na počítači Foto dokumentácia	•	Prefalenie ser	Uw 	d Totel M.S. 48 %±2 U System 16%±2 isk Usage 1%±5	29. Mar 2012 16:05:57	OK - because all c TRUE - Memory Total M.S.* (42 %) TRUE - CPU Us (10%) < 99% TRUE - Daik Us 90% Delby for FAILED 6	conditions are true (Dasgo "Used < 99.% ago "System" ago = (1%) < Mate is 10m 8s	SEAMBE2	HPESSEP	prender	y BA 20. Mar 3 16:00:27	812	Editorial

Image: Stav Watchu

After clicking on the watch's name, you'll see its history Počitač SEANB02 - HP6930P - Pavol



Hodnota Minimum Maximum Priemer CPU System 4 34 15.780 Disk Usage 100 22.366 1 43 Used Total M.S. 41 41.683

Image: História zaťaženia servera Date: 02/05/2012Images:





Links

[1] https://customermonitor.co/how-cm-works-0/monitoring-and-diagnostics/introduction-setup-online-monitoring-watches

- [2] https://customermonitor.co/sites/default/files/1_4.png
- [3] https://customermonitor.co/sites/default/files/2_3.png
- [4] https://customermonitor.co/sites/default/files/3_1.png
- [5] https://customermonitor.co/sites/default/files/4_1.png
- [6] https://customermonitor.co/sites/default/files/5_2.png
- [7] https://customermonitor.co/sites/default/files/6_1.png
- [8] https://customermonitor.co/sites/default/files/7_1.png
- [9] https://customermonitor.co/sites/default/files/8_1.png [10] https://customermonitor.co/sites/default/files/9_1.png
- [11] https://customermonitor.co/sites/default/files/15.png
- [12] https://customermonitor.co/sites/default/files/10_1.png
- [13] https://customermonitor.co/sites/default/files/11_1.png
- [14] https://customermonitor.co/sites/default/files/12_1.png
- [15] https://customermonitor.co/sites/default/files/13_1.png
- [16] https://customermonitor.co/sites/default/files/14_1.png