CONTROL for

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IBM i Monitoring
Based on Nagios and equivalent tools

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General description of the product

Contact
Bruno Taverne
Email : btaverne@m81.fr
Tel : +33 6 20 27 22 17

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Product description

The purpose of Control for i product is to allow to monitor an IBM i partition by using a product like Nagios, or one of the derived products.

Nagios allows to check basic elements: PING, CPU utilization, Disk usage, etc. It doesn't allow to monitor if a sub-system is active, or if backups have run correctly last night.

The plugin provided by Control for I allows to connect Nagios and the IBM I partition. It has only one parameter, that is an IBM I command that will be executed on the partition. The message returned by the command will be the text displayed by Nagios, or sent by email if it's an alert.

The product is delivered with many control commands to meet most of the IBM i operating requirements. Those commands can also be used interactively on a 5250 session, in order to test a control, or in a CLP program realized by the user.

The user may create its own specific commands, that will easily be used as new Nagios checks.

Every command is made to run quickly, to avoid reaching the time out during the call by Nagios.

On the IBM i partition, an agent must be started permanently. His role is to accept orders from Nagios, and to return the answer.

The schedule and the frequency of the controls are managed by Nagios.

The Control for i product is available in English and French versions.

The IBM i monitoring commands

User specific commands

Any program that the user already has, and that answers YES/NO, 1/0, ... can be converted to a Nagios probe in less than 30 minutes.
This allows to keep and reuse the specific developments made by users.

The commands below are delivered with the product to monitor the operation of the IBM i system.

CTCHKBCH, Check that a Batch job has run

The CTCHKBCH command checks whether a job has been executed within a time range passed as a parameter. It can be used for example to check that a night batch, or a backup job has actually started, and has actually ended, within the time range passed in parameter.

CTCHKBRM, Check that the backup with BRMS is correct

The CTCHKBRM command check that the backups made by BRMS have been correctly performed.

CTCHKBRMEX, Check volumes availability for BRMS

The CTCHKBRMEX command is used to check the availability of expired volumes for a given media class in BRMS. This control realized in the afternoon makes it possible to avoid an error during the backup for lack of supports.

CTCHKCPU, Check the use of the CPU

The CTCHKCPU command generates an alert if the power consumed exceeds the percentage passed in parameter. It is possible to select a job list, a list of subsystems, or the entire system.

CTCHKDSK, Check the disk space utilization

The CTCHKDSK command is used to generate an alert if the disk space utilization exceeds the limit passed in parameter.

CTCHKDTAA, Check the content of a Data Area

The CTCHKDTAA command checks if the content of a Data Area corresponds to the value passed in parameter. If the value is not the same, an alert is generated.
This command makes it possible, among other things, to carry out a specific check very quickly.

CTCHKJOB, Check a job status

The CTCHKJOB command checks if a job is active, or inactive.

CTCHKJOBQ, Check the number of jobs in a JOBQ

The CTCHKJOBQ command checks that the number of jobs present in a JOBQ does not exceed a certain number, passed in parameter.

CTCHKLCKW, Check jobs in the LCKW state

The CTCHKLCKW command generates an alert if at least one job is in the LCKW (Lock Wait) state in the system.

CTCHKMSGW, Check jobs in the MSGW state

The CTCHKMSGW command generates an alert if at least one job is in the MSGW (Message Wait) state in the system.

CTCHKPING, Make a PING from the IBM i partition

The CTCHKPING command makes it possible to check that a correspondent is available (via the PING command) from the IBM i partition.

CTCHKPRB, Check for System Problems

The CTCHKPRB command generates an alert when a system problem is detected. System problems are visible with the WRKPRB command.

CTCHKSAV, Check that the backup is correct

The CTCHKSAV command checks that the backups have been correctly performed by the SAVSECDTA, SAVCFG, SAVLIB, SAVDLO and SAV system commands.

CTCHKSBS, Check the status of a subsystem

The CTCHKSBS command checks that a subsystem is active, or on the contrary that it is stopped. It also allows you to check a list of jobs that must be active in this subsystem.

CTCHKUSR, Check disabled profiles

The CTCHKUSR command is used to generate an alert if a profile is disabled, based on a list passed in parameter.

The high availability monitoring commands

The commands below are used to monitor the operation of Quick EDH and MIMIX High Availability software.

CTCHKEDH, Check the status of Quick EDH replication

The CTCHKEDH command checks that the replication provided by the product Quick EDD-HA (of the company Traders) is correct, and undergoes no excessive delay.

CTCHKMMXAG, Check the status of a MIMIX Application Group

The CTCHKMMXAG command checks that all elements of a MIMIX Application Group are active, or in a state that allows a proper replication.

CTCHKMMXDG, Check the status of a MIMIX Data Group

The CTCHKMMXDG command checks that all elements of a MIMIX Data Group are active, or in a state that allows a proper replication.

CTCHKMMXDS, Check the status of replication for a MIMIX Data Group

he CTCHKMMXDS command checks that there is no delay in the replication of a MIMIX Data Group, no errors are detected, and no objects are temporarily excluded from replication.

The M3 software monitoring commands

The commands below are used to monitor the operation of the M3 software, based on the data provided by the Grid, and by the Server View.

CTM3HSTSTS, Check Hosts status

The CTM3HSTSTS command checks that the Hosts are active and the level of memory they use.

CTM3JOBSTS, Check jobs status

The CTM3JOBSTS command is used to check the level of CPU utilization and the activity level of M3 jobs (*AUTOJOB, * INTERACT, * BATCH, * MIJOBS).

CTM3NBAJ, Check the number of autojobs

The CTM3NBAJ command checks that the number of Autojobs is correct.

CTM3NODSTS, Check Nodes status

The CTM3NODSTS command is used to check the CPU and memory usage level of the M3 Nodes.

CTM3SVCSTS, Check services status

The CTM3SVCSTS command is used to check that the services are actives.