op5Monitor-Excel-Import

This program is intented to bulk-import hosts into a op5 Monitor installation using the op5 Monitor's HTTP API. It reads an Excel-file (.xlsx format, introduced in Excel 2007) line-by-line. The first line is interpreted as the header line. The headings have to conclude with Nagios Core's host object attribute names, such as "address", "alias", "hostgroups", "parents", ... in order to create the host objects. Each column of the Excel file has to use either one of the below listed header captions as a heading or one of the following special headings:

- a custom host variable in the VARIABLENAME form
- the word CLONEFROM
- the word autodetect win disks

Even if the heading is defined for a certain column, you can leave the cell empty for one of several hosts. In this case the script will act as if the corresponding column would not exist at all.

Command line arguments

- h, --help print this help messages
- -d, --debug print very detailed debugging information on the screen while executing program
- -s, --save Save all changes to op5 Monitor API after executing the program
- -s, --saveonly ONLY save changes. Intented to be used to save changes issued by the script when executing it without the "--save" parameter
- -c <config_file>, --config <config_file> specify the configuration file to use. Default is to search for one in the path /opt/api-scripts/api-scripts.config.yml
- -x <Excel-File>, --excelfile <Excel-File> specify the Excel-File needed to feed this program with informations about the hosts to add to op5 Monitor.

Excel file column headers

Scalar column headers

The following header captions can be used for scalar type attributes. These attributes can contain a single string or number as an value. Please note Excel's behavior of automatically reformatting strings when an inappropriate cell formatting is set. Especially, IP addresses tend to get misformatted when using the "standard" cell formatting in Excel (it is recommended to use "Text" as cell formatting instead).

- host name
- alias
- address
- action_url
- icon_image

- statusmap image
- template
- check command
- max check attempts
- check interval
- retry interval
- check period
- notification interval
- notification period
- display name
- check command args
- freshness_threshold
- event handler
- event handler args
- low_flap_threshold
- high flap threshold
- first notification delay
- icon image alt
- notes
- notes url

The only required attributes that have to be to be in order to create a host correctly, are the "host name" and "address" attributes.

Array-style column headers

Some of the header captions can be used for multi-value options. Every of the cells may contain a single word or value, but also a list of values, separated by commas. This way, for example you can add two host groups by using the "network, servers" notation. The array-style column headers are the following ones:

- hostgroups
- flap_detection_options
- parents
- contact groups
- notification options
- children
- contacts
- stalking options

None of these attributes are required.

BOOLean column headers

Some of the host object attributes that can be used as headings for the columns in the Excel file are

booleans. They can have a "true" or a "false" value. You can use the content "1", "true" or "yes" as a value to set the cell to "true", all other content will set the cell to "false" and an empty cell will make the script NOT pass this attribute to op5 Monitor which means that the default value will be used. The following header captions are the booleans:

- active_checks_enabled
- passive checks enabled
- event handler enabled
- flap detection enabled
- process perf data
- retain_status_information
- retain nonstatus information
- notifications_enabled
- obsess
- obsess over host
- check freshness

Cloning of service checks from specific hosts

If the special word <code>CLONEFROM</code> is found as a header for any of the columns and the value of the corresponding cell for the specific host that is to be added is set to "true", "1" or "yes", all service check objects that are directly attached to the host object(s) defined in the <code>CLONEFROM</code> cell for the specific host (comma-notation can be used to list several source hosts) are cloned to the newly created host.

Please note that only DIRECTLY attached service objects are cloned, not those that are attached to a host group object to which the host object belongs.

Automatic detection and adding of Windows Disk usage checks

If the special word AUTODETECT_WIN_DISKS is found as a header for any of the columns and the value of the corresponding cell for the specific host that is to be added is set to "true", "1", or "yes", the host object's address will be connected through the "check_nrpe" check plugin to ask the NSClient++ agent on the remote Windows host for available Windows disk drives (C:, D: etc.) that are of type "fixed" (normal hard drives, no CDROMs etc.). For each of the disk drives detected on the remote host, a corresponding service check is automatically added.

Please note that this feature starts the NRPE client locally. Master/Poller environments are not (yet) supported. If the monitored Windows host is not directly reachable via check_nrpe from the machine where this program is installed, the automatic detection and adding of Disk Drive service checks will not work.

Configuration File

By default, the configuration file is searched in the path /opt/api-scripts/api-scripts.config.yml. The

configuration file is a representation of a hash data structure, noted in the YAML format. The default configuration file looks as follows:

```
op5api:
server: localhost
user: monitor
password: monitor
authentication_realm: op5 Monitor API Access
ssl_verify_hostname: false
excel_import:
check_nrpe_path: /opt/plugins/check_nrpe
check_nrpe_use_ssl: false
windows_disk_checks:
check_command: check_nrpe_win_drivesize
service_description: Disk %s utilization
check_command_args: Drive=%s MaxWarn=80% MaxCrit=90%
template: default-service
```

The configuration values should be self-explaining. Under the <code>op5api</code> section the credentials and server address of the op5 Monitor installation is configured. The <code>excel_import</code> section configures all specific options for this program to work. Under the sub-section <code>windows_disk_checks</code> the options for the automatically added Windows Disk Usage service checks are set.