<u>Nagios</u>[®]

NDOUtils Database Model

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Last Updated: August 29, 2007

NDOUtils DB Model

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Introduction

This documentation is still in flux, and there are undoubtably errors presents, so take everything you find here with a grain of salt. If you have suggestions, changes, etc. for the documentation, please let me know.

Table Names

The NDOUtils addon allows users to specify a custom prefix to each table name in the database. By default, this prefix is "nagios_". The tables documented here are listed without any prefix, so the "instances" table as referenced in this documentation may actually be called "nagios_instances" in the database.

Configuration Tables

I have not yet documented the tables that contain configuration data. A few changes are being made in the Nagios 3 code that will alter the table structures, so I don't want to have to redo a ton of work updating the documentation. The configuration tables represent a read-only output view of the configuration that Nagios is using. Nagios doesn't read the tables to determine its configuration – the tables are just provided so you know how Nagios was last configured.

Central Tables

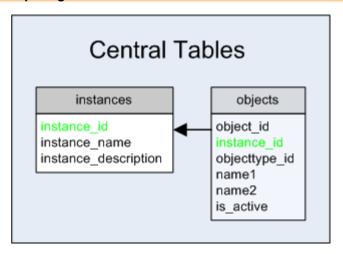
Central Tables

There are two "core" or "central" tables, described below, that are referenced by nearly other table in the database. Read below for more information.

Table List

instances objects

Relationship Diagram



[Continued on the next page]

instances Table

Description:

This table is needed to ensure that multiple instances of Nagios can store their configuration and status information in the same database. Each instance represents a different Nagios installation/process. A new instance will automatically be created when the user specifies a new instance name (when running one of the NDOUtils components) that does not already exist in the database.

| Field | Туре | Notes |
|----------------------|--------------|--|
| instance_id | SMALLINT | Unique number identifying a distinct instance of Nagios. |
| instance_name | VARCHAR(64) | Instance name, as passed to and used by NDOUtils components. |
| instance_description | VARCHAR(128) | Optional text describing the instance in more detail. |

objects Table

Description:

This table is used to store all current (and past) objects that are (and have been) defined in your Nagios configuration files. Why are the names of the objects stored in this table and not elsewhere? Well, when you delete an object definition from you Nagios configuration, that object will no longer appear in the object tables of the database. Since you're still going to want to be able to run reports for old hosts, service, etc., we store the name of the object here so you're not completely baffled by the reports you get. :-)

Structure:

| Field | Туре | Notes | Values |
|---------------|--------------|---|--|
| object_id | INT | A unique number identifying the object. | |
| instance_id | SMALLINT | A number indicating the instance of Nagios to which the object belongs. | |
| objecttype_id | SMALLINT | A number indicating what type of object this is. | 1 = Host 2 = Service 3 = Host group 4 = Service group 5 = Host escalation 6 = Service escalation 7 = Host dependency 8 = Service dependency 9 = Timeperiod 10 = Contact 11 = Contact group 12 = Command 13 = Extended host info (deprecated) 14 = Extended service info (deprecated) |
| name1 | VARCHAR(128) | The first name associated with the object definition, as used in your Nagios configuration files. | |
| name2 | VARCHAR(128) | The second name (if any) associated with the object definition, as used in your Nagios configuration files. This field is only used for service definitions which have a host name (name1 field) and service description (name2 field). | |
| is_active | SMALLINT | A number indicating whether or not the object is currently defined in your Nagios configuration files. If an object definition is removed from your Nagios configuration files, it will remain in this table, but will be marked as inactive. | 0 = Inactive 1 = Active |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |

Debugging Tables

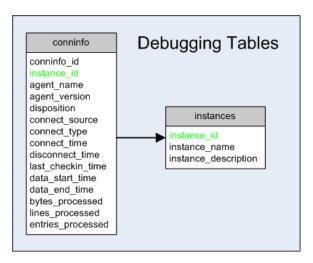
Debugging Tables

There is currently only one table in the database that is used to hold information that might be useful for debugging purposes. Read below for more information.

Table List

conninfo

Relationship Diagram



[Continued on next page]

conninfo Table

Description:

This table is used to store debugging information regarding the NDO2DB daemon and the user agents (e.g. LOG2DB, NDOMOD NEB module, etc.) that connect to it. This information is probably only interesting if you are attempting to debug connection problems.

Structure:

| Field | Туре | Notes | Values |
|-------------------|-------------|---|---|
| conninfo_id | INT | Unique number identifying the connection info record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios for which data is being transmitted/processed. | |
| agent_name | VARCHAR(32) | Text string identifying the user agent that is sending data to the NDO2DB daemon. | Typically "NDOMOD" or "LOG2NDO". |
| agent_version | VARCHAR(8) | Text string identifying the version of the user agent that is sending data. | |
| disposition | VARCHAR(16) | Text string identifying the disposition or type of data that is being sent to the NDO2DB daemon. | "REALTIME" if being sent directly from a running Nagios process or "ARCHIVED" if being sent from a flat file. |
| connect_source | VARCHAR(16) | Text string identifying the method that the user agent is using to connect to the NDO2DB daemon. | "TCPSOCKET" or "UNIXSOCKET". |
| connect_type | VARCHAR(16) | Text string indentifying whether this connect was a new connection, or if it was a reconnect due to an earlier communications failure between the user agent and the NDO2DB daemon. | "INITIAL" or "RECONNECT". |
| connect_time | DATETIME | The initial time the user agent connected to the daemon. | |
| disconnect_time | DATETIME | The time (if any) the user agent disconnect from the daemon. | |
| last_checkin_time | DATETIME | The time that the user agent last checked in with the daemon to indicate that it was still alive and sending data. | |
| data_start_time | DATETIME | The timestamp of the first data that the user agent sent to the daemon. | |
| data_end_time | DATETIME | The timestamp of the last (or latest) data that the user agent sent to the daemon. | |
| bytes_processed | INT | The number of bytes of data that have been sent by the user agent and processed by the daemon. | |
| lines_processed | INT | The number of lines of data that have been sent by the user agent and processed by the daemon. | |
| entries_processed | INT | The number of data entries that have been sent by the user agent and processed by the daemon. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |

Historical Data Tables

Historical Data Tables

There are several tables in the database which are used to hold "historical" information about Nagios and the hosts/services it is monitoring or was monitoring at some point in the past. Keep in mind that historical items may not necessarily be "old" – they could have occurred 5 seconds ago, so the information used within these tables could/should be used when reporting current status information. Links to hosts/services which no longer exist in the Nagios configuration are maintained due to references for these previous objects existing in the *objects* table – this is by design.

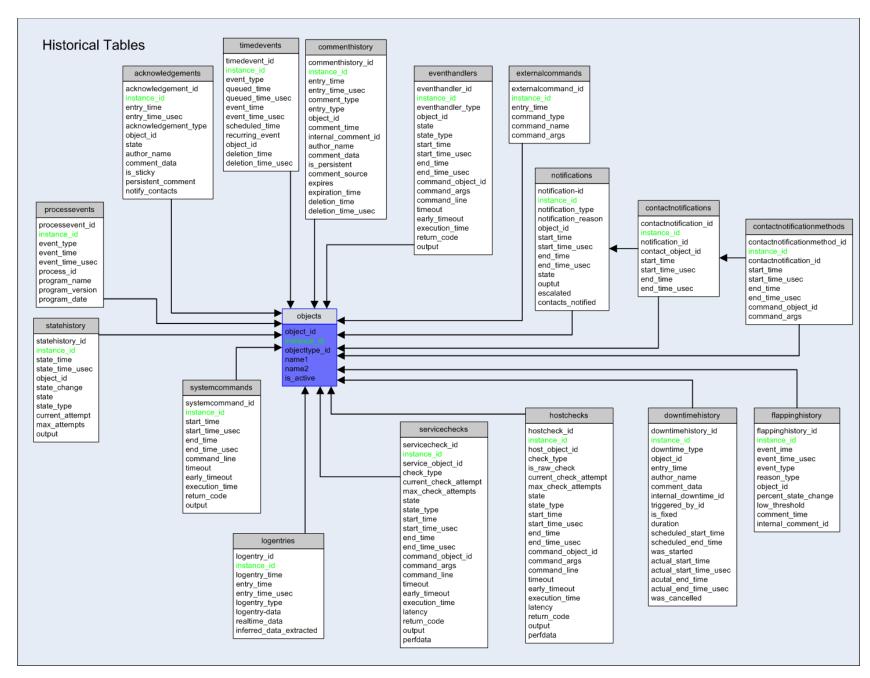
Table List

acknowledgements commenthistory contactnotifications downtimehistory eventhandlers externalcommands flappinghistory hostchecks logentries notifications processevents servicechecks statehistory systemcommands timedevents

[Continued on the next page]

Relationship Diagram

Notes: For clarity, the *instances* table (to which all these tables are related) is not shown. There are 17 historical tables, so please excuse the mess. :-)



acknowledgements Table

Description:

This table is used to store host and service acknowledgements for historical purposes.

Structure:

| Field | Туре | Notes | Values |
|----------------------|--------------|--|--|
| acknowledgement_id | INT | Unique number identifying the acknowledgement record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| entry_time | DATETIME | Date and time the acknowledgement was entered. | |
| entry_time_usec | INT | Microsecond portion of acknowledgement entry time. | |
| acknowledgement_type | SMALLINT | Indicates whether this is a host or service acknowledgement. | 0 = Host ack 1 = Service ack |
| object_id | INT | The object id of the host or service this acknowledgement applies to. | |
| state | SMALLINT | Integer indicating the state the host or service was in when the acknowledgement was made. | Host acks 0 = UP 1 = DOWN 2 = UNREACHABLE Service acks 0 = OK 1 = WARNING 2 = CRTICAL 3 = UNKNOWN |
| author_name | VARCHAR(64) | Text field containing the name of the person who made the acknowledgement. | |
| comment_data | VARCHAR(255) | Text field containing notes on the acknowledgement. | |
| is_sticky | SMALLINT | Indicates whether or not the acknowledgement is considered "sticky". | 0 = Not sticky 1 = Sticky |
| persistent_comment | SMALLINT | Indicates whether or not the comment associated with the acknowledgement is persistent. | 0 = Not persistent 1 = Persistent |
| notify_contacts | SMALLINT | Indicates whether or not contacts are to be notified of the acknowledgement. | 0 = Don't notify 1 = Notify |

| tolation por | | |
|--------------|-----------------------|--|
| Field | Foreign Key | |
| instance_id | instances.instance_id | |
| object_id | objects.object_id | |

commenthistory Table

Description:

This table is used to store historical host and service comments. Current comments will also appear in this table, but it is recommended to use the *comments* table to retrieve a list of current host and service comments.

Structure:

| Field | Туре | Notes | Values |
|---------------------|--------------|--|---|
| commenthistory_id | INT | Unique number identifying the comment record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| entry_time | DATETIME | Date and time the comment was entered. | |
| entry_time_usec | INT | Microsecond portion of comment entry time. | |
| comment_type | SMALLINT | Indicates whether this is a host or service comment. | 1 = Host comment 2 = Service comment |
| entry_type | SMALLINT | Indicates how this comment came to be entered. | 1 = User 2 = Scheduled downtime 3 = Flapping 4 = Acknowledgement |
| object_id | INT | The object id of the host or service this acknowledgement applies to. | |
| comment_time | DATETIME | Date and time associated with the comment. | |
| internal_comment_id | INT | The comment ID internal to the Nagios daemon, which may no longer be valid or present. | |
| author_name | VARCHAR(64) | Text field containing the name of the person who made the comment. | |
| comment_data | VARCHAR(255) | Text field containing the comment. | |
| is_persistent | SMALLINT | Indicates whether or not the comment is persistent. | 0 = Not persistent 1 = Persistent |
| comment_source | SMALLINT | Indicates the source of the comment. | 0 = Internal (Nagios) 1 = External (user) |
| expires | SMALLINT | Indicates whether or not the comment expires. | 0 = Doesn't expires 1 = Expires |
| expiration_time | DATETIME | Date and time at which the comment expires. | |
| deletion_time | DATETIME | Date and time (if any) when the comment was deleted. | |
| deletion_time_usec | INT | Microsecond time (if any) when the comment was deleted. | |

| Field | Foreign Key | |
|-------------|-----------------------|--|
| instance_id | instances.instance_id | |
| object_id | objects.object_id | |

contactnotifications Table

Description:

This table is used to store a historical record of host and service notifications that have been sent out to individual contacts.

Structure:

| Field | Туре | Notes | Values |
|------------------------|----------|--|--------|
| contactnotification_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| notification_id | INT | The id of the notification this record is associated with | |
| contact_object_id | INT | The object id of the contact this notification was send to. | |
| start_time | DATETIME | The date/time the notification to this contact was started. | |
| start_time_usec | INT | The microsecond portion of the time the notification started. | |
| end_time | DATETIME | The date/time the notification to this contact ended. | |
| end_time_usec | INT | The microsecond portion of the time the notification ended. | |

| Field | Foreign Key | | |
|-------------------|-------------------------------|--|--|
| instance_id | instances.instance_id | | |
| notification_id | notifications.notification_id | | |
| contact_object_id | objects.object_id | | |

contactnotificationmethods Table

Description:

This table is used to store a historical record of commands (methods) that were used to contact individuals about host and service problems and recoveries.

Structure:

| Field | Туре | Notes | Values |
|------------------------------|----------|--|--------|
| contactnotificationmethod_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| contactnotification_id | INT | The id of the contact notification this record is associated with. | |
| start_time | DATETIME | The date/time the notification command started. | |
| start_time_usec | INT | The microsecond portion of the time the notification command started. | |
| end_time | DATETIME | The date/time the notification command ended. | |
| end_time_usec | INT | The microsecond portion of the time the notification command ended. | |
| command_object_id | INT | The id of the command that was used for the notification command. | |
| command_args | VARCHAR | The arguments that were passed to the notification command. | |

| Field | Foreign Key |
|------------------------|---|
| instance_id | instances.instance_id |
| contactnotification_id | contactnotifications.contactnotification_id |
| command_object_id | objects.object_id |

downtimehistory Table

Description:

This table is used to store a historical record of scheduled host and service downtime.

| Field | Type | Notes | Values |
|----------------------|----------|---|--|
| downtimehistory_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| downtime_type | SMALLINT | A number identifying what type of scheduled downtime this is. | 1= Service downtime 2 = Host downtime |
| object_id | INT | The object id of the host or service this scheduled downtime is associated with. | |
| entry_time | DATETIME | The date/time the scheduled downtime was entered/submitted. | |
| author_name | VARCHAR | The name of the person who scheduled this downtime. | |
| comment_data | VARCHAR | A comment, as entered by the author, associated with the scheduled downtime. | |
| internal_downtime_id | INT | A number (internal to the Nagios daemon) associated with the scheduled downtime. | |
| triggered_by_id | INT | The id of another scheduled downtime entry that scheduled downtime is optionally triggered by. Non-triggered downtimes will have a value of 0 in this field. | |
| is_fixed | SMALLINT | A number indicating whether or not this scheduled downtime is fixed (i.e. its start and end times are exactly what they are listed below as) or if it is flexible. | |
| duration | SMALLINT | The number of seconds that the scheduled downtime should last. This is only used by Nagios is the downtime is flexible. If the downtime is fixed, this value should reflect the difference between the start and end times. | |
| scheduled_start_time | DATETIME | The date/time the scheduled downtime is supposed to start. If this is a flexible (non-fixed) downtime, this refers to the earliest possible time that the downtime can start. | |
| scheduled_end_time | DATETIME | The date/time the scheduled downtime is supposed to end. If this is a flexible (non-fixed) downtime, this refers to the last possible time that the downtime can start. | |
| was_started | SMALLINT | Number indicated whether or not the scheduled downtime was started. Some flexible downtimes may never actually start if the host/service they are associated with never enter a problem state. | 0 = Was not started 1 = Was started |

| Field | Туре | Notes | Values |
|------------------------|----------|---|--|
| actual_start_time | DATETIME | The date/time the scheduled downtime was actually started (if applicable). | |
| actual_start_time_usec | INT | Microsecond portion of the actual start time. | |
| actual_end_time | DATETIME | The date/time the scheduled downtime actually ended. | |
| actual_end_time_usec | INT | Microsecond portion of the actual end time. | |
| was_cancelled | SMALLINT | Number indicating whether or not the scheduled downtime was cancelled before it ended normally. | 0 = Not cancelled 1 = Cancelled early |

| Field | Foreign Key |
|-----------------|--------------------------------------|
| instance_id | instances.instance_id |
| object_id | objects.object_id |
| triggered_by_id | [downtimehistory.]downtimehistory_id |

eventhandlers Table

Description:

This table is used to store a historical record of host and service event handlers that have been run.

NOTE: This table is usually trimmed periodically by the NDO2DB daemon, as it would otherwise grow to an enormous size.

| Field | Type | Notes | Values |
|-------------------|----------|--|---|
| eventhandler_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| eventhandler_type | SMALLINT | A number indicating what type of event handler ths is. | 0 = Host event handler 1 = Service event handler 2 = Global host event handler 3 = Global service event handler |
| object_id | INT | The object id of the host or service associated with this event handler. | |
| state | SMALLINT | Number indicating the state of host or service when the event handler was run. | For host event handlers: 0 = UP 1 = DOWN 2 = UNREACHABLE For service event handlers: 0 = OK 1 = WARNING 2 = CRITICAL 3 = UNKNOWN |
| state_type | SMALLINT | Number indicating the state type of the host or service when the event handler was run. | 0 = SOFT state 1 = HARD state |
| start_time | DATETIME | The date/time the event handler started. | |
| start_time_usec | INT | The microsecond portion of the time the event handler started. | |
| end_time | DATETIME | The date/time the event handler ended. | |
| end_time_usec | INT | The microsecond portion of the time the event handler ended. | |
| command_object_id | INT | The id of the command that was run. | |
| command_args | ARGS | Arguments to the event handler command that was run. | |
| command_line | ARGS | Fully expanded command line of the event handler that was run. | |
| timeout | SMALLINT | Timeout value in seconds for the event handler. | |
| early_timeout | SMALLINT | Number indicating whether or not the event handler command timed | 0 = Did NOT time out |

| Field | Туре | Notes | Values |
|----------------|----------|--|---------------|
| | | out. | 1 = Timed out |
| execution_time | DOUBLE | Time in seconds that the event handler command was running. | |
| return_code | SMALLINT | The return code value from the event handler command. | |
| output | VARCHAR | The first line of text output (if any) from the event handler command. | |

| Field | Foreign Key | |
|-------------------|-----------------------|--|
| instance_id | instances.instance_id | |
| object_id | objects.object_id | |
| command_object_id | objects.object_id | |

externalcommands Table

Description: This table is used to store a historical record of external commands that have been processed by the Nagios daemon.

Structure:

| Field | Туре | Notes | Values |
|--------------------|----------|--|-------------------------|
| externalcommand_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| entry_time | DATETIME | The date/time the external command was processed. | |
| command_type | SMALLINT | A number indicating what type of external command this is. Each external command has its own type or "id". | See Nagios source code. |
| command_name | VARCHAR | The name of the command that was processed. | |
| command_args | VARCHAR | Optional arguments that were specified with the command. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |

flappinghistory Table

Description:

This table is used to store a historical record of host and service flapping events.

Structure:

| Field | Туре | Notes | Values |
|----------------------|----------|---|--|
| flappinghistory_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| event_time | DATETIME | The date/time of the flapping event. | |
| event_time_usec | INT | The microsecond portion of the time of the flapping eent. | |
| event_type | SMALLINT | The type of flapping event indicated by this record. | 1000 = Flapping started 1001 = Flapping stopped |
| reason | SMALLINT | Number indicating the reason (if any) that the host or service stopped flapping. This is only valid if this records is a flapping stopped event (see event_type field). | 1 = Flapping stopped normally 2 = Flapping was disabled |
| flapping_type | SMALLINT | Number indicating whether this flapping event relates to a host or service. | 0 = Host 1 = Service |
| object_id | INT | The id of the host or service associated with the flapping event. | |
| percent_state_change | DOUBLE | The percent state change of the host or service at the time of the event. | |
| low_threshold | DOUBLE | The low flapping percent state change threshold (as configured in Nagios) of the host or service. | |
| high_threshold | DOUBLE | The high flapping percent state change threshold (as configured in Nagios) of the host or service. | |
| comment_time | DATETIME | The date/time of the comment associated with the flapping event. | |
| internal_comment_id | INT | The number (internal to the Nagios daemon) of the comment associated with the flapping event. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |
| object_id | objects.object_id |

hostchecks Table

Description:

This table is used to store a historical record of "raw" and "processed" host checks.

What's the difference between raw and processed host checks? Raw checks are the raw results from a host check command that gets executed. Nagios must do some processing on the raw host check results before it can determine the real state of the host. Host checks (plugins) cannot directly determine whether a host is DOWN or UNREACHABLE – only Nagios can do that. In fact, host checks return the same status codes as service checks (OK, WARNING, UNKNOWN, or CRITICAL). Nagios processes the raw host check result to determine the true state of the host (UP, DOWN, or UNREACHABLE). These "processed" checks contain the true state of the host.

NOTE: This table is usually trimmed periodically by the NDO2DB daemon, as it would otherwise grow to an enormous size.

| Field | Туре | Notes | Values |
|-----------------------|----------|--|--|
| hostcheck_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| host_object_id | INT | The id of the host this check applies to. | |
| check_type | SMALLINT | Number indicating whether this is an active or passive check. | 0 = Active check 1 = Passive check |
| is_raw_check | SMALLINT | Number indicating whether this is a "raw" or "processed" host check. | 0 = Processed check 1 = Raw check |
| current_check_attempt | SMALLINT | Current check attempt of the host. | |
| max_check_attempts | SMALLINT | Max check attempts (as defined in Nagios) for the host. | |
| state | SMALLINT | Current state of the host. | For raw checks: 0 = UP 1 = DOWN/UNREACHABLE For processed checks: 0 = UP 1 = DOWN |
| | | | 2 = UNREACHABLE |
| state_type | SMALLINT | Number indicating whether the host is in a soft or hard state. | 0 = SOFT state 1 = HARD state |
| start_time | DATETIME | The date/time the host check was started. | |
| start_time_usec | INT | Microsecond portion of the time the host check was started. | |
| end_time | DATETIME | The date/time the host check was completed. | |
| end_time_usec | INT | Microsecond portion of the time the host check was completed. | |

| Field | Туре | Notes | Values |
|-------------------|----------|---|--------------------------------------|
| command_object_id | INT | The id of the command that was used to perform the host check. | |
| command_args | VARCHAR | The arguments that were passed to the host check command. | |
| command_line | VARCHAR | The fully expanded command line that was used to check the host. | |
| timeout | SMALLINT | Number of seconds before the host check command would time out. | |
| early_timeout | SMALLINT | Number indicating whether or not the host check timed out early. | 0 = Did NOT timeout 1 = Timed out |
| execution_time | DOUBLE | Number of seconds it took to execute the host check. | |
| latency | DOUBLE | Number of seconds the host check was "late" in being executed. Scheduled host checks can have a latency, but on-demand checks will have a latency of 0. Latency is the difference between the time the check was scheduled to be executed and the time it was actually executed. For passive checks it is the different between the timestamp on the passive host check result (submitted through the external command file) and the time the passive check result was processed by Nagios. | |
| return_code | SMALLINT | The return code from the host check command. | |
| output | VARCHAR | Status text output from the host check command. | |
| perfdata | VARCHAR | Optional performance data returned from the host check command. | |

| Field | Foreign Key |
|-------------------|-----------------------|
| instance_id | instances.instance_id |
| host_object_id | objects.object_id |
| command_object_id | objects.object_id |

logentries Table

Description:

This table is used to store a historical record of entries from the Nagios log.

Structure:

| Field | Туре | Notes | Values |
|-------------------------|----------|---|-------------------------|
| logentry_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| logentry_time | DATETIME | The date/time associated with the log entry. This is NOT necessarily the same as the date/time that Nagios wrote the log entry to the log file (see below). | |
| entry_time | DATETIME | The date/time that Nagios wrote this log entry to the log file. | |
| entry_time_usec | INT | The microsecond portion of the time that Nagios wrote this log entry. | |
| logentry_type | INT | A number indicating what general type of log entry this is. | See Nagios source code. |
| logentry_data | VARCHAR | The log entry that was written out to the log file. | |
| realtime_data | SMALLINT | A number used internally by the NDO2DB daemon. | |
| inferred_data_extracted | SMALLINT | A number used internally by the NDO2DB daemon. | |

| Field | Foreign Key | |
|-------------|-----------------------|--|
| instance_id | instances.instance_id | |

notifications Table

Description:

This table is used to store a historical record of host and service notifications that have been sent out. For each notification, one or more contacts receive notification messages. These contact notifications are stored in the *contactnotifications* table.

| Field | Туре | Notes | Values |
|---------------------|----------|--|---|
| notification_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| notification_type | SMALLINT | Number indicating whether this is a host or service notification | 0 = Host notification 1 = Service notification |
| notification_reason | SMALLINT | Number indicating the type of or reason for the notification. | 0 = Normal notification 1 = Problem acknowledgement 2 = Flapping started 3 = Flapping stopped 4 = Flapping was disabled 5 = Downtime started 6 = Downtime ended 7 = Downtime was cancelled 99 = Custom notification |
| object_id | INT | The id of the host or service this notification applies to. | |
| start_time | DATETIME | The date/time the notification was started. | |
| start_time_usec | INT | Microsecond portion of the time the notification was started. | |
| end_time | DATETIME | The date/time the notification ended. | |
| end_time_usec | INT | Microsecond portion of the time the notification ended. | |
| state | SMALLINT | Number indicating the state of the host or service when the notification was sent out. | For Host Notifications: 0 = UP 1 = DOWN 2 = CRITICAL For Service Notifications: 0 = OK 1 = WARNING 2 = CRITICAL 3 = UNKNOWN |
| output | VARCHAR | The current plugin (text) output of the host or service when the notification was sent out. | |
| escalated | SMALLINT | Number indicating whether or not this notification was escalated or | 0 = NOT escalated |

| Field | Туре | Notes | Values |
|---------------------|----------|---|---------------|
| | | not. | 1 = Escalated |
| contacts_notifified | SMALLINT | Number of contacts that were notified about the host or service as part of this notification. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |
| object_id | objects.object_id |

processevents Table

Description:

This table is used to store a historical record of Nagios process events (program starts, restarts, shutdowns, etc.).

Structure:

| Field | Туре | Notes | Values |
|-----------------|----------|--|---|
| processevent_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| event_type | SMALLINT | Number indicating the type of process event that occurred. | 100 = Process start 101 = Process daemonized 102 = Process restart 103 = Process shutdown 104 = Prelaunch 105 = Event loop start 106 = Event loop end |
| event_time | DATETIME | The date/time that the event occurred. | |
| event_time_usec | INT | The microsecond portion of the time the event occurred. | |
| process_id | INT | The current process ID (PID) of the Nagios daemon. | |
| program_name | VARCHAR | "Nagios" | |
| program_version | VARCHAR | Version of Nagios that is running (e.g. "3.1") | |
| program_date | VARCHAR | Release date of Nagios | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |

servicechecks Table

Description:

This table is used to store a historical record of service checks that have been performed.

NOTE: This table is usually trimmed periodically by the NDO2DB daemon, as it would otherwise grow to an enormous size.

| Field | Type | Notes | Values |
|-----------------------|----------|--|--|
| servicecheck_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| service_object_id | INT | The id of the service this record refers to. | |
| check_type | SMALLINT | Number indicating whether this was an active or a passive service check. | 0 = Active check 1 = Passive check |
| current_check_attempt | SMALLINT | Number indicating the current check attempt for the service. | |
| max_check_attempts | SMALLINT | Number indicating the max number of check attempts for the service. | |
| state | SMALLINT | Number indicating the current state of the service. | 0 = OK 1 = WARNING 2 = CRITICAL 3 = UNKNOWN |
| state_type | SMALLINT | Number indicating the current state type of the service. | 0 = SOFT state 1 = HARD state |
| start_time | DATETIME | The date/time the service check was started. | |
| start_time_usec | INT | Microsecond portion of the time the service check was started. | |
| end_time | DATETIME | The date/time the service check ended. | |
| end_time_usec | INT | Microsecond portion of the time the service check ended. | |
| command_object_id | INT | The id of the command that was run to perform the service check. | |
| command_args | VARCHAR | The arguments passed to the command that was run to perform the service check. | |
| command_line | VARCHAR | The fully expanded command line that was executed to perform the service check. | |
| timeout | SMALLINT | Number of seconds before the service check command was scheduled to timeout. | |
| early_timeout | SMALLINT | Number indicating whether or not the service check timed out. | 0 = Did NOT timeout 1 = Timed out |
| execution_time | DOUBLE | Number of seconds it took to execute the service check command. | |

| Field | Туре | Notes | Values |
|-------------|----------|--|--------|
| latency | DOUBLE | Number of seconds the service check was "late" in being executed. For active checks this is the difference between the scheduled service check time and the time the check actually occurred. For passive checks this is the difference between the timestamp on the passive check result (submitted through the external command file) and the time the passive check result was picked up by the Nagios daemon for processing. | |
| return_code | SMALLINT | The return code from the service check command. | |
| output | VARCHAR | The status output that was returned from the service check command. | |
| perfdata | VARCHAR | Optional performance data that was returned from the service check command. | |

| Field | Foreign Key |
|-------------------|-----------------------|
| instance_id | instances.instance_id |
| service_object_id | objects.object_id |
| command_object_id | objects.object_id |

statehistory Table

Description:

This table is used to store a historical record of host and service state changes.

| Field | Туре | Notes | Values |
|-----------------------|----------|--|---|
| statehistory_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| state_time | DATETIME | The date/time that the state change occurred. | |
| state_time_usec | INT | The microsecond portion of the time the state change occurred. | |
| object_id | INT | The id of the host or service object this state change applies to. | |
| state_change | SMALLINT | Number indicating whether or not a state change occurred for the host or service. | 0 = No state change 1 = State change |
| state | SMALLINT | Number indicating the current state of the host or service. | For Hosts: 0 = UP 1 = DOWN 2 = UNREACHABLE For Services: 0 = OK 1 = WARNING 2 = CRITICAL 3 = UNKNOWN |
| state_type | SMALLINT | Number indicating whether the service is in a soft or hard state. | 0 = SOFT state 1 = HARD state |
| current_check_attempt | SMALLINT | Number indicating the current check attempt for the host or service. | |
| max_check_attempts | SMALLINT | Number indicating the max check attempts (as configured in Nagos) for the host or service. | |
| last_state | SMALLINT | Number indicating the last state (whether hard or soft) of the host or service (if available). | For Hosts: -1 = <unavailable> 0 = UP 1 = DOWN 2 = UNREACHABLE For Services: -1 <unavailable> 0 = OK 1 = WARNING 2 = CRITICAL</unavailable></unavailable> |

| Field | Туре | Notes | Values |
|-----------------|----------|--|---|
| | | | 3 = UNKNOWN |
| last_hard_state | SMALLINT | | For Hosts: -1 = <unavailable> 0 = UP 1 = DOWN 2 = UNREACHABLE For Services: -1 <unavailable> 0 = OK 1 = WARNING 2 = CRITICAL</unavailable></unavailable> |
| output | VARCHAR | The current plugin/status output of the host or service. | |

| Field | Foreign Key | |
|-------------|-----------------------|--|
| instance_id | instances.instance_id | |
| object_id | objects.object_id | |

systemcommands Table

Description:

This table is used to store a historical record of system commands that are run by the Nagios daemon. Note that each event handler, notification, OCSP command, etc. requires that Nagios execute a system command.

NOTE: This table is usually trimmed periodically by the NDO2DB daemon, as it would otherwise grow to an enormous size.

Structure:

| Field | Туре | Notes | Values |
|------------------|----------|--|--------------------------------------|
| systemcommand_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| state_time | DATETIME | The date/time the command was executed. | |
| state_time_usec | INT | The microsecond portion of the time the command was executed. | |
| end_time | DATETIME | The date/time the command finished executing. | |
| end_time_usec | INT | The microsecond portion of the time the command finished executing. | |
| command_line | VARCHAR | Fully expanded command line that was executed. | |
| timeout | SMALLINT | Number of seconds before the command should timeout. | |
| early_timeout | SMALLINT | Number indicating whether or not the command timed out early. | 0 = Did NOT timeout 1 = Timed out |
| execution_time | DOUBLE | Number of seconds it took to execute the command. | |
| return_code | SMALLINT | Return code of the command. | |
| output | VARCHAR | First line of text output (if available) that was returned from the command. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |

timedevents Table

Description:

This table is used to store a historical record of timed events that the Nagios process handled. Timed events are internal to the Nagios daemon and used to initiate service checks, host checks, status file updates, etc. They are at the heart of what Nagios does and how it operates.

NOTE: This table is usually trimmed periodically by the NDO2DB daemon, as it would otherwise grow to an enormous size.

Structure:

| Field | Туре | Notes | Values |
|--------------------|----------|--|---|
| systemcommand_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| event_type | SMALLINT | Number indicating the type of event that was run. | See Nagios source code. |
| queued_time | DATETIME | The date/time the event was added to the event queue. | |
| queued_time_usec | INT | Microsecond portion of the time the event was added to the event queue. | |
| event_time | DATETIME | The date/time the event was handled. | |
| event_time_usec | INT | Microsecond portion of the time the event was handled. | |
| scheduled_time | DATETIME | The date/time the event was scheduled to be handled/run. | |
| recurring_event | SMALLINT | Number indicating whether or not the event is a recurring one or a one-time event. | 0 = One-time event 1 = Recurring event |
| object_id | INT | The id of the host or service that the event applies to. Not all events apply to hosts or services – in these cases the value of this field will be 0. | |
| deletion_time | DATETIME | The date/time the event was deleted/removed from the event queue. | |
| deletion_time_usec | INT | Microsecond portion of the time the event was removed from the event queue. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |
| object_id | objects.object_id |

Current Status Tables

Current Status Tables

There are several tables in the database which are used to hold current status information on the Nagios process and all hosts and services that it is monitoring. Entries in these tables are cleared whenever the Nagios daemon (belonging to the same instance) (re)starts.

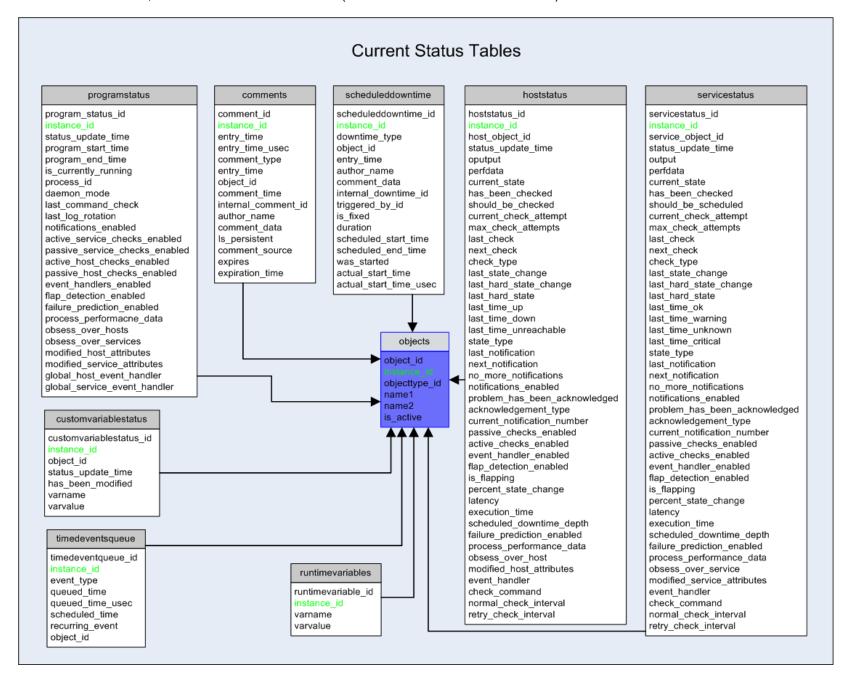
Table List

comments customvariablestatus hoststatus programstatus runtimevariables scheduleddowntime servicestatus timedeventqueue

[Continued on the next page]

Relationship Diagram

Notes: To reduce clutter, the links to the *instances* table (to which all these tables are related) is not shown.



comments Table

Description:

This table is used to store current host and service comments. Historical comments can be found in the *commenthistory* table.

Structure:

| Field | Туре | Notes | Values |
|---------------------|--------------|--|---|
| comment_id | INT | Unique number identifying the comment record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| entry_time | DATETIME | Date and time the comment was entered. | |
| entry_time_usec | INT | Microsecond portion of comment entry time. | |
| comment_type | SMALLINT | Indicates whether this is a host or service comment. | 1 = Host comment 2 = Service comment |
| entry_type | SMALLINT | Indicates how this comment came to be entered. | 1 = User 2 = Scheduled downtime 3 = Flapping 4 = Acknowledgement |
| object_id | INT | The object id of the host or service this acknowledgement applies to. | |
| comment_time | DATETIME | Date and time associated with the comment. | |
| internal_comment_id | INT | The comment ID internal to the Nagios daemon. | |
| author_name | VARCHAR(64) | Text field containing the name of the person who made the comment. | |
| comment_data | VARCHAR(255) | Text field containing the comment. | |
| is_persistent | SMALLINT | Indicates whether or not the comment is persistent. | 0 = Not persistent 1 = Persistent |
| comment_source | SMALLINT | Indicates the source of the comment. | 0 = Internal (Nagios) 1 = External (user) |
| expires | SMALLINT | Indicates whether or not the comment expires. | 0 = Doesn't expires 1 = Expires |
| expiration_time | DATETIME | Date and time at which the comment expires. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |
| object_id | objects.object_id |

customvariablestatus Table

Description:

This table is used to store the current state/values of all custom host, service, and contact variables. Custom variables are only support in Nagios 3.x and higher, so this table will be empty for Nagios 2.x.

Structure:

| Field | Туре | Notes | Values |
|-------------------------|--------------|---|--|
| customvariablestatus_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| object_id | INT | The object id of the host or service this acknowledgement applies to. | |
| status_update_time | DATETIME | Date and time the status of the custom variable was last updated. | |
| has_been_modified | INT | Indiciates whether the value of the custom variable has been modified (during runtime) from its original value in the config files. | 0 = Has not been modified 1 = Has been modified |
| varname | VARCHAR(255) | Text field containing the name of the custom variable. | |
| varvalue | VARCHAR(255) | Text field containing the value of the custom variable. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |
| object_id | objects.object_id |

hoststatus Table

Description:

This table is used to store the current status of hosts that are being monitored.

| NT | | |
|----------|---|--|
| | Unique number identifying the record. | |
| MALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| NT | The object id of the host this status entry is associated with. | |
| ATETIME | Date and time the status data was updated. | |
| 'ARCHAR | Plugin output from the latest host check | |
| 'ARCHAR | Performance data from the latest host check | |
| SMALLINT | Number indicating the current state of the host | 0 = UP 1 = DOWN 2 = UNREACHABLE |
| MALLINT | Number indicating whether or not the host has been checked yet | 0 = Not checked 1 = Checked |
| MALLINT | Number indicating whether or not checks should be regularly scheduled for this host. | 0 = Not scheduled 1 = Scheduled |
| MALLINT | Number indicating the current check attempt of the host. This is only interesting during soft host states. | |
| MALLINT | Number indicating how many maximum check attempts will be made to determine the hard state of the host. | |
| ATETIME | Time the host was last checked. | |
| ATETIME | The the host is scheduled to be checked next. Will be set to the epoch if the host is not scheduled for another check. | |
| MALLINT | Number indicating if the last host check was an active or passive check. | 0 = Active 1 = Passive |
| ATETIME | Time the host last had a hard or soft state change. Will be set to the epoch if the host has not changed state. | |
| ATETIME | The the host last had a hard state change. Will be setup to the epoch if the host has not changed state. | |
| ATETIME | Time the host was last in an UP state (if ever). | |
| ATETIME | Time the host was last in a DOWN state (if ever). | |
| | ATETIME ARCHAR ARCHAR MALLINT | which this entry is associated with. The object id of the host this status entry is associated with. Date and time the status data was updated. Plugin output from the latest host check ARCHAR Plugin output from the latest host check ARCHAR Performance data from the latest host check MALLINT Number indicating the current state of the host MALLINT Number indicating whether or not the host has been checked yet MALLINT Number indicating whether or not checks should be regularly scheduled for this host. MALLINT Number indicating the current check attempt of the host. This is only interesting during soft host states. MALLINT Number indicating how many maximum check attempts will be made to determine the hard state of the host. ATETIME Time the host was last checked. ATETIME The the host is scheduled to be checked next. Will be set to the epoch if the host is not scheduled for another check. MALLINT Number indicating if the last host check was an active or passive check. The the host last had a hard or soft state change. Will be set to the epoch if the host has not changed state. The the host last had a hard state change. Will be set to the epoch if the host has not changed state. The the host last had a hard state change. Will be set to the epoch if the host has not changed state. The the host was last in an UP state (if ever). |

| Field | Туре | Notes | Values |
|-------------------------------|----------|---|---|
| last_time_unreachable | DATETIME | Time the host was last in an UNREACHABLE state (if ever). | |
| state_type | SMALLINT | Number indicating the type of state the host is in | 0 = SOFT state 1 = HARD state |
| last_notification | DATETIME | Time a notification was last sent out for the host (if ever). | |
| next_notification | DATETIME | Next possible time that a notification can be sent out for the host. | |
| no_more_notifications | SMALLINT | Number indicating whether or not more notifications can be sent out about the current host problem. | 0 = Send notifications 1 = Do not send notifications |
| notifications_enabled | SMALLINT | Number indicating whether or not notifications are enabled for this host. | 0 = Notifications disabled 1 = Notifications enabled |
| problem_has_been_acknowledged | SMALLINT | Number indicating whether or not the current host problem has been acknowledged. | 0 = Not acknowledged 1 = Acknowledged |
| acknowledgement_type | SMALLINT | Number indicating the type of acknowledgement associated with the host. | 0 = None 1 = Normal 2 = Sticky |
| current_notification_number | SMALLINT | Number indicating the current notification number for the current host problem. This number gets reset to 0 when the host recovers. | |
| passive_checks_enabled | SMALLINT | Number indicating whether or not passive checks are enabled for this host. | 0 = Disabled 1 = Enabled |
| active_checks_enabled | SMALLINT | Number indicating whether or not active checks are enabled for this host. | 0 = Disabled 1 = Enabled |
| event_handler_enabled | SMALLINT | Number indicating whether or not the host's event handler is enabled. | 0 = Disabled 1 = Enabled |
| flap_detection_enabled | SMALLINT | Number indicating whether or not flap detection is enabled for this host. | 0 = Disabled 1 = Enabled |
| is_flapping | SMALLINT | Number indicating whether or not the host is currently flapping. | 0 = Not flapping 1 = Flapping |
| percent_state_change | DOUBLE | Number indicating the current percent state change (a measure of stability/volatility) for the host. | |
| latency | DOUBLE | Number of seconds that the host check was "late" in being executed. The different between the checks scheduled time and the time it was actually checked. | |
| execution_time | DOUBLE | Number of seconds it took to perform the last check of the host. | |
| scheduled_downtime_depth | SMALLINT | Number indicating how many periods of scheduled | 0 = Not in scheduled dowtime |

| Field | Туре | Notes | Values |
|----------------------------|----------|--|---------------------------------|
| | | downtime are currently active for this host. | >0 = In scheduled downtime |
| failure_prediction_enabled | SMALLINT | Number indicating whether or not failure prediction (not yet implemented) is enabled for this host. | 0 = Disabled 1 = Enabled |
| process_performance_data | SMALLINT | Number indicating whether or not performance data should be processed for this host. | 0 = Disabled 1 = Enabled |
| obsess_over_host | SMALLINT | Number indicating whether or not this host should be obsessed over. | 0 = Do not obsess 1 = Obsess |
| modified_host_attributes | INT | Number indicating which attributes of the host have been modified during runtime. Used by the retention data routines. | |
| event_handler | VARCHAR | The current event handler command associated with the host. | |
| check_command | VARCHAR | The current check command associated with the host. | |
| normal_check_interval | DOUBLE | Number of seconds between normal checks of the host. | |
| retry_check_interval | DOUBLE | Number of seconds between retry checks of the host. | |
| check_timeperiod_object_id | INT | Unique number of the timeperiod object currently used for determining times the host can be checked. | |

| Field | Foreign Key |
|----------------------|-----------------------|
| instance_id | instances.instance_id |
| host_object_id | objects.object_id |
| timeperiod_object_id | objects.object_id |

programstatus Table

Description:

This table stored status information on the currently (or previously) running Nagios process/daemon.

| Field | Туре | Notes | Values |
|--------------------------------|----------|--|--|
| programstatus_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| status_update_time | DATETIME | Date and time the status of the process was last updated. | |
| program_start_time | DATETIME | Date and time the Nagios process was started. | |
| program_end_time | DATETIME | Date and time the Nagios process as stopped (if currently not running). | |
| is_currently_running | SMALLINT | Indicates whether or not the Nagios process is currently running. | 0 = Process is not running 1 = Process is running |
| process_id | INT | The processed ID (PID) of the Nagios process. | |
| daemon_mode | SMALLINT | Indicates whether Nagios is running as a foreground process or a daemon. | 0 = Foreground process 1 = Daemon |
| last_command_check | DATETIME | Date and time the Nagios process last checked external commands. | |
| last_log_rotation | DATETIME | Date and time the log file was last rotated (if at all). | |
| notifications_enabled | SMALLINT | Indicates whether or not notifications are enabled. | 0 = Disabled 1 = Enabled |
| active_service_checks_enabled | SMALLINT | Indicates whether or not active service checks are enabled. | 0 = Disabled 1 = Enabled |
| passive_service_checks_enabled | SMALLINT | Indicates whether or not passive service checks are enabled. | 0 = Disabled 1 = Enabled |
| active_host_checks_enabled | SMALLINT | Indicates whether or not active host checks are enabled. | 0 = Disabled 1 = Enabled |
| passive_host_checks_enabled | SMALLINT | Indicates whether or not passive host checks are enabled. | 0 = Disabled 1 = Enabled |
| event_handlers_enabled | SMALLINT | Indicates whether or not event handlers are enabled. | 0 = Disabled 1 = Enabled |
| flap_detection_enabled | SMALLINT | Indicates whether or not flap detection is enabled. | 0 = Disabled 1 = Enabled |
| failure_prediction_enabled | SMALLINT | Indicates whether or not failure prediction is enabled. | 0 = Disabled |

| Field | Туре | Notes | Values |
|-------------------------------|--------------|---|-------------------------------------|
| | | | 1 = Enabled |
| process_performance_data | SMALLINT | Indicates whether or not performance data is enabled/being processed. | 0 = Disabled 1 = Enabled |
| obsess_over_hosts | SMALLINT | Indicates whether or not hosts are being obsessed over. | 0 = Disabled 1 = Enabled |
| obsess_over_services | SMALLINT | Indicates whether or not services are being obsessed over. | 0 = Disabled 1 = Enabled |
| modified_host_attributes | INT | Indicates what (if any) host-related program status variables have been modified during runtime. | * See Nagios source code for values |
| modified_service_attributes | INT | Indicates what (if any) service-related program status variables have been modified during runtime. | * See Nagios source code for values |
| global_host_event_handler | VARCHAR(255) | Text field indicating the current global host event handler command that is being used. | |
| global_service_event_handlers | VARCHAR(255) | Text field indicating the current global service event handler command that is being used. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |

runtimevariables Table

Description:

This table is used to store some runtime variables from the Nagios process that may be useful to you. The only variables currently stored in this table are some initial variables calculated at startup, but more variables may be stored here in future versions.

Structure:

| Field | Туре | Notes | Values |
|--------------------|--------------|--|--------|
| runtimevariable_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| varname | VARCHAR(64) | Text field containing the name of the variable. | |
| varvalue | VARCHAR(255) | Text field containing the value of the variable. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |

scheduleddowntime Table

Description:

This table is used to store current host and service downtime, which may either be current in effect or scheduled to begin at a future time. Historical scheduled downtime information can be found in the *downtimehistory* table.

| Field | Туре | Notes | Values |
|----------------------|--------------|--|---|
| scheduleddowntime_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| downtime_type | SMALLINT | Indicates whether this is a host or service downtime entry. | 1 = Service downtime 2 = Host downtime |
| object_id | INT | The object id of the host or service this downtime applies to. | |
| entry_time | DATETIME | Date and time this downtime was entered. | |
| author_name | VARCHAR(64) | Text field containing the name of the person who created this scheduled downtime. | |
| comment_data | VARCHAR(255) | Text field containing information about this scheduled downtime (as entered by the user). | |
| internal_downtime_id | INT | The ID number (internal to the Nagios daemon) associated with this scheduled downtime entry. | |
| triggered_by_id | INT | The internal Nagios ID number (if any) of another scheduled downtime entry that this downtime is "triggered" (started) by. If this field is nonzero, this is a triggered downtime entry, otherwise it is not. | |
| is_fixed | SMALLINT | Indicates whether this is a "fixed" scheduled downtime entry (that should start and end at the start and end times indicated) or a "flexible" entry that can start at a variable time. | 0 = Flexible (not fixed) 1 = Fixed |
| duration | SMALLINT | Indicates the number of seconds that the scheduled downtime should last. This is usually only needed if this is "flexible" downtime, which can start at a variable time, but lasts for the specified duration. | |
| scheduled_start_time | DATETIME | Date and time that the downtime is scheduled to start if it is "fixed" dowtime. If this is a "flexible" downtime entry, this is the first possible time the downtime can start. | |
| scheduled_end_time | DATETIME | Date and time the downtime is scheduled to end if it is "fixed" downtime. If this is a "flexible" downtime entry, this is the last possible time the downtime can start. | |
| was_started | SMALLINT | Indicates whether or not the downtime was started (is currently | 0 = Not started (inactive) |

| Field | Туре | Notes | Values |
|------------------------|----------|--|----------------------|
| | | active). | 1 = Started (active) |
| actual_start_time | DATETIME | Date and time the scheduled downtime was actually started. | |
| actual_start_time_usec | INT | Microsecond portion of time the scheduled downtime was actually started. | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |
| object_id | objects.object_id |

servicestatus Table

Description:

This table is used to store current status information for all services that are being monitored.

| Field | Туре | Notes | Values |
|------------------------|----------|---|--|
| servicestatus_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| service_object_id | INT | The id of the service this record is associated with. | |
| status_update_time | DATETIME | The date/time the status record was updated. | |
| output | VARCHAR | The text output from the most current service check. | |
| perfdata | VARCHAR | Optional performance data from the most current service check. | |
| current_state | SMALLINT | Number indicating the current state of the service. | 0 = OK 1 = WARNING 2 = CRITICAL 3 = UNKNOWN |
| has_been_checked | SMALLINT | Number indicating whether or not the service has been checked yet. | 0 = Has NOT been checked 1 = Has been checked |
| should_be_scheduled | SMALLINT | Number indicating whether or not the service should be scheduled for periodic checks on a regular basis. | 0 = Not scheduled 1 = Scheduled |
| current_check_attempt | SMALLINT | The current check attempt for the service. | |
| max_check_attempts | SMALLINT | The max check attempts (as configured in Nagios) for the service. | |
| last_check | DATETIME | The date/time the service was last checked. Set to the epoch if the service has not been checked yet. | |
| next_check | DATETIME | The date/time the service is scheduled to be checked next. | |
| check_type | SMALLINT | Number indicating whether or not the last service check was active or passive. | 0 = Active 1 = Passive |
| last_state_change | DATETIME | The date/time the service last changed state (if at all). This gets updated for both HARD and SOFT state changes. | |
| last_hard_state_change | DATETIME | The date/time the service last changed HARD states (if at all). | |
| last_time_ok | DATETIME | The date/time the service was last in an OK state (if at all). | |
| last_time_warning | DATETIME | The date/time the service was last in a WARNING state (if at all). | |
| last_time_unknown | DATETIME | The date/time the service was last in an UNKNOWN state (if at all). | |
| last_time_critical | DATETIME | The date/time the service was last in a CRITICAL state (if at all). | |

| Field | Туре | Notes | Values |
|-------------------------------|----------|--|--|
| state_type | SMALLINT | Number indicating whether the service is in a hard or soft state. | 0 = SOFT state 1 = HARD state |
| last_notification | DATETIME | The date/time that a notification was last sent out for the current service problem (if applicable). | |
| next_notification | DATETIME | The earliest date/time that the next notification can be sent out for the current service problem (if applicable). | |
| no_more_notifications | SMALLINT | Number indicating whether or not future notifications can be sent out for the current service problem. | 0 = Do not send more notifications 1 = Keep sending notifications |
| notifications_enabled | SMALLINT | Number indicating whether notifications are enabled for the service. | 0 = Disabled 1 = Enabled |
| problem_has_been_acknowledged | SMALLINT | Number indicating whether or not the current status problem has been acknowledged. | 0 = Not acknowledged 1 = Acknowledged |
| acknowledgement_type | SMALLINT | Number indicating the type of acknowledgement (if any). | 0 = No acknowledgement 1 = Normal acknowledgement 2 = Sticky acknowledgement |
| current_notification_number | SMALLINT | Number indicating how many notifications have been sent out about the current service problem (if applicable). | |
| passive_checks_enabled | SMALLINT | Number indicating whether or not passive checks are enabled for the service. | 0 = Disabled 1 = Enabled |
| active_checks_enabled | SMALLINT | Number indicating whether or not active checks are enabled for the service. | 0 = Disabled 1 = Enabled |
| event_handler_enabled | SMALLINT | Number indicating whether or not the service event handler is enabled. | 0 = Disabled 1 = Enabled |
| flap_detection_enabled | SMALLINT | Number indicating whether or not flap detection is enabled for the service. | 0 = Disabled 1 = Enabled |
| is_flapping | SMALLINT | Number indicating whether ot not the service is currently flapping. | 0 = Not flapping 1 = Flapping |
| percent_state_change | DOUBLE | Number indicating the current percent state change (a measure of volatility) for the service. | |
| latency | DOUBLE | Number indicating how "late" the last service check was in being run. For active checks, this is the difference between the time the service was scheduled to be the checked and the time it was actually checked. For passive checks, this is the difference between the timestamp on the passive check (submitted via an external command) and the time Nagios processed the check result. | |
| execution_time | DOUBLE | Number of seconds it took to run the last service check. | |
| scheduled_downtime_depth | SMALLINT | Number indicating how many periods of scheduled downtime are | |

| Field | Туре | Notes | Values |
|-----------------------------|----------|--|---|
| | | currently in effect for the service. A value of 0 indicates the service is not in a period of downtime. | |
| failure_prediction_enabled | SMALLINT | Number indicating whether or not failure prediction is enabled for the service. This feature has not yet been implemented. | 0 = Disabled 1 = Enabled |
| process_performance_data | SMALLINT | Number indicating whether or not performance data should be processed for the service. | 0 = Do NOT process perfdata 1 = Process perfdata |
| obsess_over_service | SMALLINT | Number indicating whether or not Nagios should obsess of check results of the service. | 0 = Do NOT obsess 1 = Obsess |
| modified_service_attributes | INT | Number indicating what service attributes have been modified during runtime. | See Nagios source code. |
| event_handler | VARCHAR | The current event handler command that is associated with the service. | |
| check_command | VARCHAR | The current check command that is used to check the status of the service. | |
| normal_check_interval | DOUBLE | The current normal check interval for the service (in seconds). | |
| retry_check_interval | DOUBLE | The current retry check interval for the service (in seconds). | |
| check_timeperiod_object_id | INT | The currently timeperiod that is used to determine when the service can be checked. | |

| Field | Foreign Key |
|----------------------------|-----------------------|
| instance_id | instances.instance_id |
| service_object_id | objects.object_id |
| check_timeperiod_object_id | objects.object_id |

timedeventqueue Table

Description:

This table is used to store all timed events that are in the Nagios event queue, scheduled to be executed at a future time. Historical timed events can be found in the *timedevents* table.

Structure:

| Field | Туре | Notes | Values |
|--------------------|----------|--|------------------------------------|
| timedeventqueue_id | INT | Unique number identifying the record. | |
| instance_id | SMALLINT | Unique number identifying the distinct instance of Nagios which this entry is associated with. | |
| event_type | SMALLINT | Value indicating the type of event. | |
| queued_time | DATETIME | Date and time the event was originally placed into the timed event queue. | |
| queued_time_usec | INT | Microsecond portion of time the event was queued. | |
| scheduled_time | INT | Date and time the event is scheduled to be executed. | |
| recurring_event | SMALLINT | Indicates whether or not this is a recurring event. | 0 = Not recurring 1 = Recurring |
| object_id | INT | The object id of the host, service, contact, etc. that this scheduled event applies to (if applicable). If the event is not associated with any particular object, this field will have a value of zero (0). | |

| Field | Foreign Key |
|-------------|-----------------------|
| instance_id | instances.instance_id |
| object_id | objects.object_id |

Configuration Tables

Configuration Tables

There are many tables in the database that are used to store Nagios configuration. Note that the data in these tables represents a read-only output view of the configuration that Nagios was using during its last (or current) run. Configuration information from these tables is NOT read by the Nagios daemon in any way, and thus cannot be used to configure Nagios.

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customobjectvariables

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hostescalation contactgroups

Relationship Diagram

TODO

Table Descriptions

TODO