OTRS
Open Technology
Real Services

Documentation

SystemMonitoring

Basic mail interface to System Monitoring Suites. Also provides deeper integration to Nagios (Acknowledge on lock and check script). Version 5.0.1 Edition

Build Date:

2015-10-15

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Preface

This module implements a basic interface to System Monitoring Suites. It works by receiving email messages sent by a Network Monitoring Suite. New tickets are created in case of component failures. Once a ticket has been opened messages regarding the effected component are attached to this ticket. When the component recovers, the ticket state can be changed or the ticket can be closed.

If an open ticket for a given Host/Service combination exists, all mails concerning this particular combination will be attached to the ticket until it's closed.

If you have questions regarding this document or if you need further information, please log in to our customer portal at portal.otrs.com with your OTRS ID and create a ticket. You do not have an OTRS ID yet? Register here for free.

Chapter 1. Feature List

1. Control flow

The following diagram illustrates how mails are handled by this module and in which cases they trigger which action. Pretty much all checks are configurable using the regular expressions given by the parameters listed above.

```
Mail matches 'FromAddress'?
|
+-> NO  --> Continue with regular mail processing
|
+-> YES --> Does a ticket with matching Host/Service combination
            already exist in OTRS?
            |
            +-> NO  -> Does 'State:' match 'NewTicketRegExp'?
            |          |
            |          +-> NO  -> Stop processing this mail
            |          |          (silent drop)
            |          |
            |          +-> YES -> Create new ticket, record Host
            |                     and Service, attach mail
            |
            +-> YES -> Attach mail to ticket
                    -> Does 'State:' match 'CloseTicketRegExp'?
                       |
                       +-> NO  -> Continue with regular mail processing
                       |
                       +-> YES -> Change ticket type as configured in
                                  'CloseActionState'
```

Besides of a few additional sanity checks this is how the SystemMonitoring module treats incoming mails. By changing the regular expressions it should be possible to adopt it to different monitoring systems.

Chapter 2. System Requirements

1. Framework

The following OTRS framework is required:

- 5.0.x

2. Packages

The following packages are required:

- None

3. Operating System

This package requires one of the following operating systems:

- None

4. Third Party Software

This third party software is required to use this package:

- A network monitoring system, such as Nagios, or HP OpenView, or similar, capable of sending out events via e-mail.

Chapter 3. Installation

The following instructions explain how to install the package.

1. Admin Interface

Please use the following URL to install the package utilizing the Admin Interface (please note that you need to be in the "admin" group).

http://localhost/otrs/index.pl?Action=AdminPackageManager

2. Command Line

Whenever you cannot use the Admin Interface for whatever reason, you may use the following command line tool ("bin/otrs.Console.pl Admin::Package::Install") instead.

```
shell> bin/otrs.Console.pl Admin::Package::Install /path/to/SystemMonitoring-5.0.1.opm
```

Chapter 4. Configuration

The package can be configured via the SysConfig in the Admin Interface. The following configuration options are available:

1. Nagios::Acknowledge::FreeField::Host.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

Name of the Dynamic Field for Host.

2. Nagios::Acknowledge::FreeField::Service.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

Name of the Dynamic Field for Service.

3. Nagios::Acknowledge::HTTP::Password.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

The http acknowledge password.

4. Nagios::Acknowledge::HTTP::URL.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

The http acknowledge url.

5. Nagios::Acknowledge::HTTP::User.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

The http acknowledge user.

6. Nagios::Acknowledge::NamedPipe::CMD.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

Named pipe acknowledge command.

7. Nagios::Acknowledge::NamedPipe::Host.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

Named pipe acknowledge format for host.

8. Nagios::Acknowledge::NamedPipe::Service.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

Named pipe acknowledge format for service.

9. Nagios::Acknowledge::Type.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

Define Nagios acknowledge type.

10. PostMaster::PreFilterModule###00-SystemMonitoring.

Group: SystemMonitoring, Subgroup: Core::PostMaster.

Basic mail interface to System Monitoring Suites. Use this block if the filter should run BEFORE PostMasterFilter.

11. PostMaster::PreFilterModule###1-SystemMonitoring.

Group: SystemMonitoring, Subgroup: Core::PostMaster.

Basic mail interface to System Monitoring Suites. Use this block if the filter should run AFTER PostMasterFilter.

12. SystemMonitoring::LinkTicketWithCI.

Group: SystemMonitoring, Subgroup: Core::ConfigItem.

Link an already opened incident ticket with the affected CI. This is only possible when a subsequent system monitoring email arrives.

13. SystemMonitoring::SetIncidentState.

Group: SystemMonitoring, Subgroup: Core::ConfigItem.

Set the incident state of a CI automatically when a system monitoring email arrives.

14. Ticket::EventModulePost###9-NagiosAcknowledge.

Group: SystemMonitoring, Subgroup: Nagios::Acknowledge.

Ticket event module to send an acknowlage to Nagios.

Chapter 5. File list

This list shows all included files and the referring permissions.

- (644) doc/en/SystemMonitoring.xml
- (644) Kernel/Config/Files/SystemMonitoring.xml
- (644) Kernel/Config/NagiosCheck.pm.example
- (644) Kernel/System/Console/Command/Maint/SystemMonitoring/NagiosCheck.pm
- (644) Kernel/System/Console/Command/Maint/SystemMonitoring/NagiosCheckTicketCount.pm
- (644) Kernel/System/PostMaster/Filter/SystemMonitoring.pm
- (644) Kernel/System/Ticket/Event/NagiosAcknowledge.pm
- (644) scripts/test/Console/Command/Maint/SystemMonitoring/NagiosCheck.t
- (644) scripts/test/Console/Command/Maint/SystemMonitoring/NagiosCheckTicketCount.t
- (644) scripts/test/SystemMonitoring.t
- (644) scripts/test/sample/NagiosCheckTesting.pm
- (644) scripts/test/sample/SystemMonitoring1.box
- (644) scripts/test/sample/SystemMonitoring2.box
- (644) var/packagesetup/SystemMonitoring.pm

Chapter 6. Tests

This module has been tested on the current state of the art in quality.

1. Unit Tests

To ensure the quality of the module, several so-called unit tests were created, to test the functionalities of this module. These unit tests can be run via command line.

ATTENTION: Please never run unit tests on a productive system, since the added test data to the system will no longer be removed. Always use a test system.

Run the package specific unit tests

To run only the unit test which will be delivered with this package, use the following command on the command line:

```
shell> perl bin/otrs.Console.pl Dev::UnitTest::Run --test
 SystemMonitoring:NagiosCheck:NagiosCheckTicketCount
```

Run all available unit tests

To run all available unit tests, use the following command on the command line:

```
shell> perl bin/otrs.Console.pl Dev::UnitTest::Run
```

Chapter 7. Change Log

5.0.1 / 2015-10-15 06:02:15

- - First formal release for OTRS 5. - Code cleanup.

4.0.91 / 2015-08-27 00:57:10

- Build for SystemMonitoring 5 beta1.