

The Industry Standard in IT Infrastructure Monitoring

Purpose

Event chains are the main function of Nagios Reactor and control the decision making process. Without event chains, Nagios Reactor would have no idea how to operate or what to do. In this document, we'll discuss how to create event chains in order to control the logical operation of Reactor. Furthermore, we'll discuss using Crons to launch our event chains on some defined schedule.

Target Audience

This document is intended for people who are new to Nagios Reactor and want to learn the basic control structures that govern events.

Access a copy of the example chain for this document at:

<http://assets.nagios.com/downloads/nagios-reactor/addons/event-chains/release-day-event-example.json>

Creating a New Reactor Chain

We have created a hypothetical scenario in which we wish to notify the users that the release day is coming as scheduled. The logic of the chain will be as follows: **IF** it is release day (Wednesday), **THEN** notify the team that today is release day.

After Logging into Nagios Reactor, click the **New Event Chain** button located in the upper right hand corner.

The screenshot shows the Nagios Reactor dashboard interface. At the top left is the Nagios Reactor logo and 'System Status: [green checkmarks]'. At the top right is the user 'nagiosadmin'. Below the logo is a navigation bar with 'Dashboard', 'Event Chains', and 'Reports'. On the right side of the navigation bar are 'Help', 'Administration', and 'Log Out'. Below the navigation bar is a breadcrumb trail 'Home /'. The main content area is titled 'Dashboard' and contains a 'Recent Event Chain Runs' bar chart with a legend for 'Successful' (blue) and 'Failed' (red). A red arrow points to a 'New Event Chain' button in the top right corner of the dashboard. To the right of the dashboard is a 'RECENT ACTIONS' section showing a successful action: 'Aug 12th, 2014 at 4:43 PM by nagiosadmin Check Disk Space Example - Run #1426 finished successfully.' Below this is a 'Context' link. At the bottom left is a 'Don't Miss...' section with two bullet points about Nagios World Conference 2014 and training services.

Next, you will be prompted for details about the new event chain.

Details

- **Name** – Required name for chain
- **Tags** – Logical grouping, for example “DevOps”
- **Short Description** – A description to help you or others know what this chain is designed to do
- **Required Context Variables** – These are variables that can be passed to the chain at run time. You can either assign context here which will always be passed to your chain or via GET or POST when the chain is invoked (This will be discussed at more detail in a different article).

To complete the process of adding the chain, click **Save and Continue**

Add Event Chain

Defining the decision process

This section describes how to define the actions that will be taken when it is (or is not) release day.

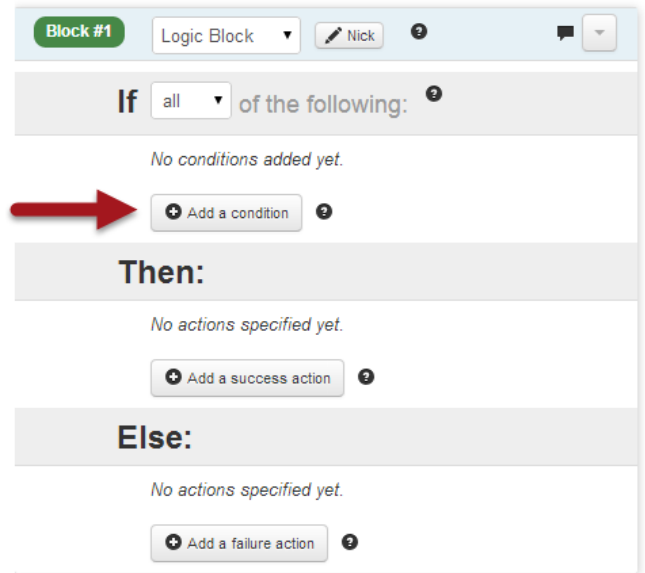
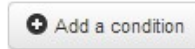
1. To begin, click the **Workflow** tab: The Workflow defines all steps to take and is how the decision structure is defined.
2. Next, let's start adding some items to our event chain: Click **Add a block**

With **Add block**, we can define the logic that goes into our chain. The logic will flow like this:

If it is Wednesday **then** email the DevOps team.

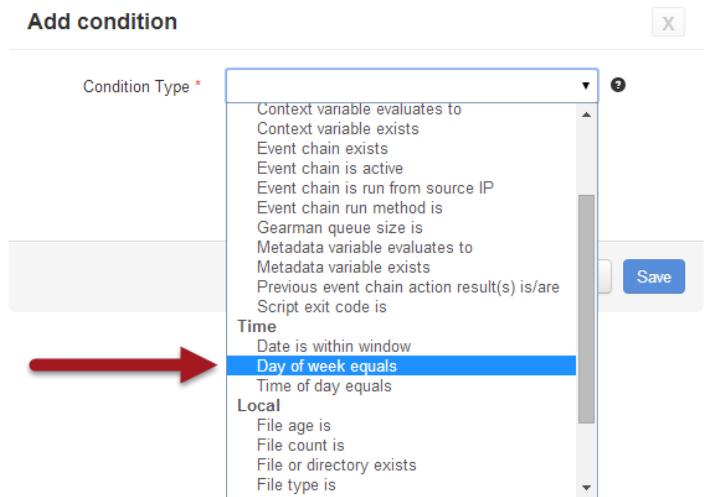
To begin:

Under **If**, Click **Add a condition**



The condition will be to complete the action if it's a specific day of the week. Therefore make the following selection under the Time condition type category.

From the dropdown, select *Day of week equals*



Select the day for the release day, in this case Wednesday:

Select, *Wednesday* and then click **Save**.

Save

Add condition [X]

Condition Type * Day of week equals

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Disabled
- Negate condition

[Close] **Save**

Now, we'll chose our "Then" condition. Since it's Wednesday, we'll send the email.

Under **Then**, click **Add a success action**

Then:

No actions specified yet.

Add a success action

This section allows us to add our action. We'll now enter the email recipients, in this case "devops@company.com", about the fact that the release day is indeed Wednesday.

Once the required fields have been completed, click **Save**.

Save

Add action [X]

Action Type * Send an email notification

Recipients * devops@company.com
Separate multiple addresses with a comma.

Subject * Release Day has arrived!

Message * Release Day has arrived!

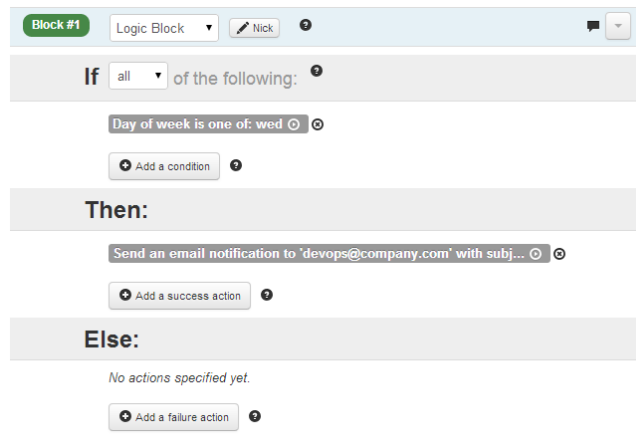
Attach File

Disabled

[Close] **Save**

Here's how our decision tree looks when all the conditions and actions have been entered and saved:

IF the day is Wednesday,
THEN send an email notification



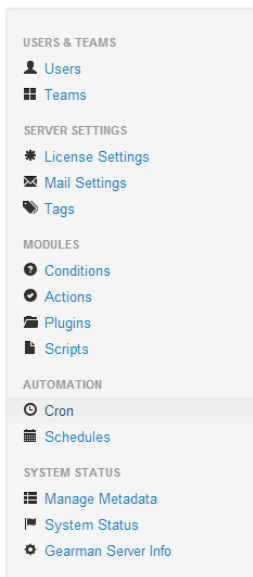
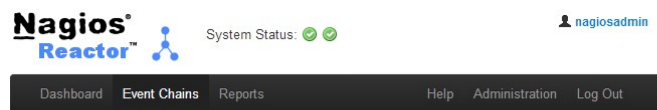
When you're done editing the chain, click **Save Changes**



Creating Crons

Lastly, we'll create a cron so that our newly created event chain will run daily. The chain logic for which time to run an action may be further defined. For example, in our chain above, it will only perform the action on Wednesday, however, every day our chain will be invoked by the cron - so it will run every day based on the cron schedule.

On the right hand side of the navigation bar, click **Administration**



Next, from the administration navigation pane, click **Cron**

Next, click the **New Cron** button



Manage Cron

Name	Active	Event Chain	Crontab	
Release Day Reminder Cron	Yes	Release Day Event	15 * * * *	

Now, we'll define the cron criteria. Every day, at a specific time, we'll have a cron run the event chain. Within the logic of the event chain, we'll determine if it's Wednesday - and what to do if it is.

General

- **Name** – required name for the cron.
- **Short Description** – Description to help you and others know what this cron does.
- **Event Chain** – This is the chain to be run. In our example we'll select the "Release Day" event chain.
- **Run As** – Which user privileges to run chain with.
- **Chain Context** – This is context which you can add to the cron when it's invoked.

Add Cron

General

Active

Name *

Description *

Event Chain *

Run As

Chain Context


Separate var/value pairs with a colon, e.g.: foo:bar.

[Add Cron form continues on the next page]

- **Cron Schedule** – define the interval to run task – In our example, we select every day to run the event chain at 8:15.

Click **Save**

Cron Schedule

 Cron Helper

Minute *

Hour *

Day of Month *

Month of Year *

Day of Week *

or

This completes the process for emailing the staff about the release day every Wednesday.

Finishing Up

If you have any questions about creating new event chains with Nagios Reactor, contact our support team via our online forum at: <http://support.nagios.com/forum>