

# Check monitoring

## Introduction

The basic jobs of checks are described here.

## When Are Checks Performed?

Checks are done by the Shinken Enterprise daemon at regular intervals, as defined by the check interval and retry interval check definitions.

The screenshot shows the 'Check Template' configuration window. It has a sidebar with categories: Generic\*, Data, Monitoring\*, Notifications, and Advanced. The main area is a table with columns 'Property', 'Value', and 'From Templates'. The 'Check Period' is set to '24x7 (default)'. The 'Check Command' is 'check\_switch\_cpu' with an 'Args' field. Other settings include 'Max Check Attempts', 'Check Interval (\*60s)' set to 5, 'Retry Interval (\*60s)' set to 1, and 'Active Checks Enabled' and 'Passive Checks Enabled' both set to 'True (default)'. There are 'Inherit from template' buttons for the Active and Passive Checks Enabled fields. The 'Duplicate for each host data' field is empty.

Property	Value	From Templates
Maintenance Period		
Check Period	24x7 (default)	24x7 [ In template generic-service ]
Check Command *	check_switch_cpu Args	no-check [ In template generic-service ]
Max Check Attempts *		
Check Interval (*60s) *	5 [ In template generic-service ]	5 [ In template generic-service ]
Retry Interval (*60s) *	1 [ In template generic-service ]	1 [ In template generic-service ]
Active Checks Enabled	True (default) False Inherit from template	True [ In template generic-service ]
Passive Checks Enabled	True (default) False Inherit from template	True [ In template generic-service ]
Duplicate for each host data		

## Parallelization of Checks

Scheduled checks are run in parallel by the pollers.

## check States

checks that are run can be in one of four different states:

- **OK**
- **WARNING**
- **UNKNOWN**
- **CRITICAL**

## check State Determination

Checks are performed by plugins, which can return a state of **OK**, **WARNING**, **UNKNOWN**, or **CRITICAL**. These plugin states directly translate to check states.

For example, a plugin which returns a **WARNING** state will cause a check to have a **WARNING** state.

## checks State Changes

When Shinken Enterprise run the status of checks, it will be able to detect when a check changes between **OK**, **WARNING**, **UNKNOWN**, and **CRITICAL** states and take appropriate action. These state changes result in different state types (**HARD** or **SOFT**), which can trigger event handlers to be run and notifications to be sent out.

Check state changes can also trigger on-demand host checks. Detecting and dealing with state changes is what Shinken Enterprise Enterprise is all about.

When check change state too frequently they are considered to be "flapping". Shinken Enterprise can detect when checks start flapping, and can cancel notifications until flapping stops and the check's state stabilizes. More information on the flap detection logic can be found on the flapping page.