Red Hat Ansible Automation Platform 2.2

Using the Automation Calculator

Evaluate costs and automated processes that determine the return on investment automation brings to your organization.

Last Updated: 2024-03-29

Red Hat Ansible Automation Platform 2.2 Using the Automation Calculator

Evaluate costs and automated processes that determine the return on investment automation brings to your organization.

Legal Notice

Copyright © 2024 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at
http://creativecommons.org/licenses/by-sa/3.0/
. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux ® is the registered trademark of Linus Torvalds in the United States and other countries.

Java ® is a registered trademark of Oracle and/or its affiliates.

XFS ® is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL ® is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js ® is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack ® Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

Abstract

Evaluate how automation is deployed across your environments and the savings associated with it. The Automation Calculator produces a total savings based on default values, but allows you to tune your cost analysis based on real numbers.

Table of Contents

MAKING OPEN SOURCE MORE INCLUSIVE 3

CHAPTER 1. ABOUT AUTOMATION CALCULATOR 4

1.1. CALCULATING YOUR AUTOMATION SAVINGS 4

1.2. TOP TEMPLATES 5

1.2.1. Curating top templates 5

1.2.2. Viewing template details 5

MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see our CTO Chris Wright's message.

CHAPTER 1. ABOUT AUTOMATION CALCULATOR

The automation calculator provides graphs, metrics and calculations that help you determine the total savings on your investment in automated processes.

Automation savings

Automation savings is produced by an analysis of the time and cost of performing a task manually, such as deploying a server, versus the time and cost associated with automating the same task. Automation savings calculations extend across all organizations, clusters, hosts and templates in an environment. Include your own estimated costs to produce a more accurate calculation.

NOTE

The initial total savings is based on default values for each variable.

Variables

Several variables are used in evaluating costs:

- **Manual cost of automation**- the approximate cost for a mid-level resource to perform a task or series of tasks.
- **Cost of automation**- costs associated with automating tasks as job templates.
- **Automation time** - the time required to run a job template.
- **Number of hosts** - the number of hosts in inventory the template runs on.

Automation formula

Automation savings is based on the following formulas:

- **Manual cost per template**= (time for a manual run on one host * (sum of all hosts across job runs)) * cost per hour.
- **Automation cost per template** = cost of automation per hour * sum of total elapsed hours for a template.
- **Savings** = sum of (manual cost - automation costs) across all templates.

1.1. CALCULATING YOUR AUTOMATION SAVINGS

The **Automation Calculator** produces its default total savings figure based on estimates for each variable.

You can tune this calculation by providing more specific organizational cost information, as well as adjusting the time values for each of the top templates. The total savings will update dynamically as each field is edited.

NOTE

Automation savings calculations are not saved in Red Hat Automation Analytics.

To calculate your automation savings:

1. Under **Calculate your automation** enter cost information for:
    a. **Manual process cost**
    b. **Automated process cost**
2. Under **Top templates**:
    a. Adjust time values for top templates to provide time to manually perform each task that the template automates.

Total savings will update based on the information you provide in each field.

1.2. TOP TEMPLATES

Top templates lists the 25 most frequently run templates across all hosts in your environment. Templates are listed in descending order starting with the highest run count. You can enter the time it takes to perform tasks manually that are automated by templates in the field adjacent to the run totals to produce a more accurate total savings. The default value is set to **60** minutes.

1.2.1. Curating top templates

You can use the toggle switch for each template to show or hide it in the bar graph to compare performance and savings based on specific templates.

- Click the toggle switch for each template to display or hide it.

The bar graph on the **Automation Calculator** will update to display those top templates selected and **Total savings** will calculate based on those templates.

1.2.2. Viewing template details

You can view detailed information for each template in **Top templates** to learn more about the template's context in the calculation of automation savings.

- Click the **Info** icon for a job template to view template details.

Top template information is provided for the following:

- **Total elapsed sum** - total run time of the template
- **Success elapsed sum** - total run time for successful template runs
- **Failed elapsed sum** - total run time for failed template runs
- **Automation percentage** - template accounts for this percentage of automation in your organization.
- **Associated organizations** - template runs against these organizations
- **Associated clusters** - Ansible Tower clusters the template runs on.