Managing Newly Discovered VMs Using Run Book Automation

Challenges:

- As a service provider:
  - I only want to actively monitor the devices my end customer is paying for
  - I want to ensure the VMs in my shared environment get aligned with the correct organization, so that they appear in my end customer's dashboard
- As an enterprise:
  - I do not want to monitor dev. and test VMs that may generate superfluous events

Solution:

Use Run Book Automation to configure new VMs to meet my business needs.

- Example rules to implement with RBA:
  - Move all VMs on specific host to the “Development” org
  - Disable collection on new VMs with “QA” in the name
  - Assign customer org from lookup in external database

Disabling Collection For New VMs

Use “device record created” events as trigger for RBA
Events added in 7.3.2, disabled by default

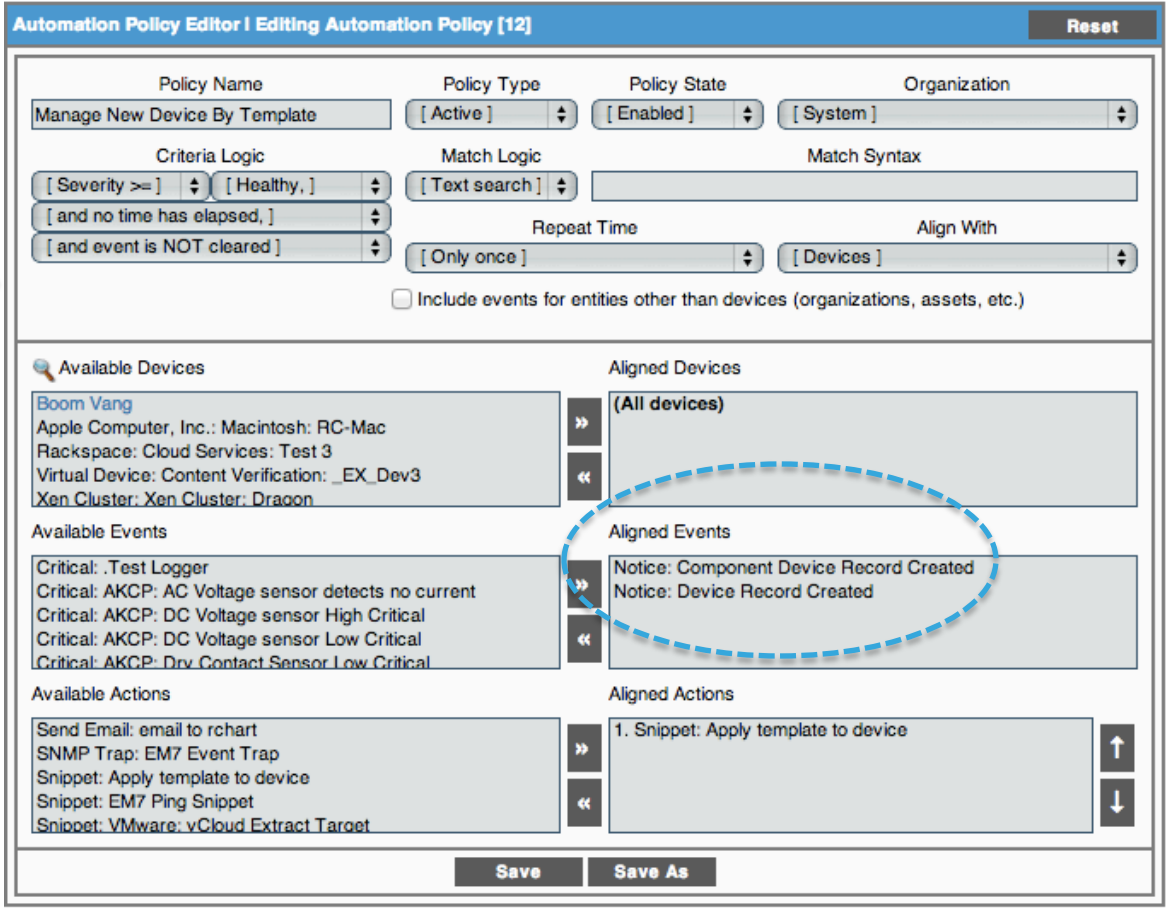
Component Device Record Created	Internal	Disabled	Yes	Notice
Device Record Created	Internal	Disabled	Yes	Notice

LAB-HYPERV	Device record created (Class: Microsoft | Hyper-V Hypervisor)	☑

Simple automation policy

Runs action: “Apply template to device”

when a new physical or component device is created



Action: Apply Template to Device

- Uses new device details to determine template to apply
  - Apply template based on device name, class, etc.
  - Optionally perform lookup in external business rules database
- Template determines any changes to device, such as:
  - Organization
  - Whether collection is enabled
  - Specific monitors to apply
- Template is applied using API call

Device Templates Used In Automation

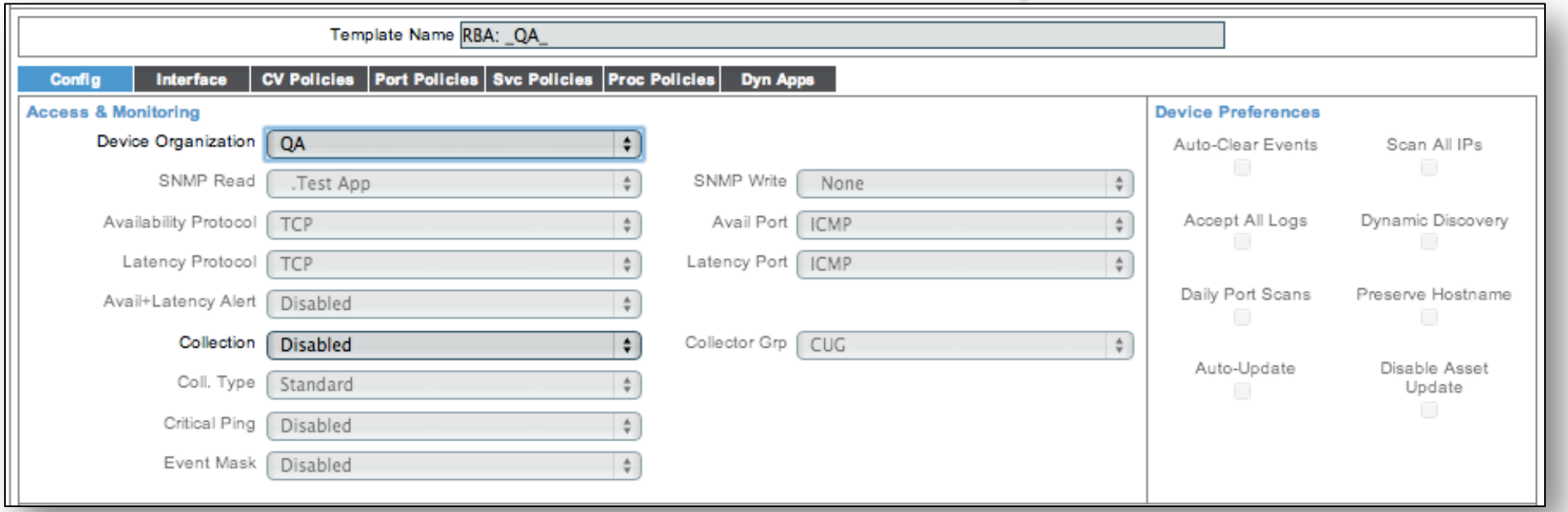
Configuration Templates | Templates Found [6] — Create | Reset | Guide

	Template Name	ID	Created By	Created On	Last Edited By	Edited On
1.	RBA: Data Center Infrastructure	8	rchart	2013-06-16 21:19:52	rchart	2013-06-17 00:36:36
2.	RBA: Exhibition Center	6	rchart	2013-06-16 20:43:21	rchart	2013-06-17 00:36:38
3.	RBA: QA	7	rchart	2013-06-16 21:19:29	rchart	2013-06-17 00:36:40
4.	UCS Template	3	em7admin	2013-03-04 17:03:24	em7admin	2013-05-29 22:12:26
5.	VMware vSphere Template	1	em7admin	2013-03-06 21:44:24	em7admin	2013-06-04 08:22:39
6.	VMware: vCloud Template	4	em7admin	2013-02-05 19:25:10	em7admin	2013-05-30 01:14:12

```
template_filter_by_name = 'api/device_template?limit=1&hide_filterinfo=1&filter.template_name='

device_templates = {
    '_EX_': 'RBA: Exhibition Center',
    '_QA_': 'RBA: QA',
    '_DC_': 'RBA: Data Center Infrastructure'
}

device_name = EM7_VALUES['%X']
device_id = EM7_VALUES['%x']

for match_val in device_templates:
    if device_name.find(match_val) != NO_MATCH:

        # Lookup template URI with this name
        template_filter = template_filter_by_name + device_templates[match_val]

        r = apiCall(hostname, username, password, template_filter, timeout=timeout_seconds)
        jtemplate = r['result'].json()[0]

        r = apiCall(hostname, username, password, 'api/device/%s' % device_id, 'POST', jtemplate['URI'],
                                            {'content-type': 'application/em7-resource-uri'}, timeout_seconds) . .
```

Example Template

Sets organization to QA and disable collection



New option on automation policy editor

Typical mode:

- Uncheck for event escalations, ticketing
- Check for business automation