



# Alert and Respond API

## On this page:

- [Retrieve All Health Rule Violations in a Business Application](#)
- [Retrieve Event Data](#)
- [Create Events](#)
- [Create a Custom Event](#)
- [Create Custom URLs for Notifications](#)
- [Create and Delete Action Suppressions](#)
- [Retrieve All Existing Action Suppressions](#)
- [Retrieve a Specific Action Suppression by ID](#)
- [Create a New Action Suppression](#)
- [Delete a Specific Action Suppression by ID](#)

The Alert and Respond APIs let you manage and monitor events, health rules and other aspects of the AppDynamics alert and respond features.

For information about the alert and response features, see [Alert and Respond](#).

## Retrieve All Health Rule Violations in a Business Application

Returns all [health rule](#) violations that have occurred in an application within a specified time frame.

### URI

/controller/rest/applications/application\_id/problems/healthrule-violations

### Input parameters

Parameter Name	Parameter Type	Value	Mandatory
application_id	URI	Provide either the application name or application id.	Yes
time-range-type	Query	Possible values are: <b>BEFORE_NOW</b> To use the "BEFORE_NOW" option, you must also specify the "duration-in-mins" parameter. <b>BEFORE_TIME</b> To use the "BEFORE_TIME" option, you must also specify the "duration-in-mins" and "end-time" parameters. <b>AFTER_TIME</b> To use the "AFTER_TIME" option, you must also specify the "duration-in-mins" and "start-time" parameters. <b>BETWEEN_TIMES</b> To use this option, you must also specify the "start-time" and "end-time" parameters. The "BETWEEN_TIMES" range includes the start-time and excludes the end-time.	Yes
duration-in-mins	Query	Duration (in minutes) to return the metric data.	If time-range-type is <b>BEFORE_NOW</b> , <b>BEFORE_TIME</b> , or <b>AFTER_TIME</b>
start-time	Query	Start time (in milliseconds) from which the metric data is returned.	If time-range-type is <b>AFTER_TIME</b> or <b>BETWEEN_TIMES</b>
end-time	Query	End time (in milliseconds) until which the metric data is returned.	If time-range-type is <b>BEFORE_TIME</b> or <b>BETWEEN_TIMES</b>
output	Query	HTTP Request parameter included as part of the URL to change the output format. Valid values are "XML" (default) or "JSON".	No

[http://demo.appdynamics.com/controller/rest/applications/7/problems/healthrule-violations?time-range-type=BEFORE\\_NOW&duration-in-mins=15](http://demo.appdynamics.com/controller/rest/applications/7/problems/healthrule-violations?time-range-type=BEFORE_NOW&duration-in-mins=15)

```

<policy-violations><policy-violation>
  <id>266</id>
  <name>CPU utilization is too high</name>
  <startTimeInMillis>1452630655000</startTimeInMillis>
  <detectedTimeInMillis>0</detectedTimeInMillis>
  <endTimeInMillis>1452630715000</endTimeInMillis>
  <incidentStatus>RESOLVED</incidentStatus>
  <severity>WARNING</severity>
  <triggeredEntityDefinition>
    <entityType>POLICY</entityType>
    <entityId>30</entityId>
    <name>CPU utilization is too high</name>
  </triggeredEntityDefinition>
  <affectedEntityDefinition>
    <entityType>APPLICATION_COMPONENT_NODE</entityType>
    <entityId>16</entityId>
    <name>Fulfillment</name>
  </affectedEntityDefinition>
  <deepLinkUrl>http://demo.appdynamics.com/controller/#location=APP_INCIDENT_DETAIL&amp;incident=266<
  /deepLinkUrl>
  <description>AppDynamics has detected a problem with Node &lt;b>Fulfillment&lt;/b>. &lt;br>
  &lt;b>CPU utilization is too high&lt;/b> started violating and is now &lt;b>warning&lt;/b>.
  &lt;br>All of the following conditions were found to be violating&lt;br>For Node &lt;b>
  Fulfillment&lt;/b>: &lt;br>1) Hardware Resources|CPU|%Busy Condition&lt;br>&lt;b>%Busy's&lt;
  /b> value &lt;b>76.0&lt;/b> was &lt;b>greater than&lt;/b> the threshold &lt;b>75.0
  &lt;/b> for the last &lt;b>30&lt;/b> minutes&lt;br>&lt;/description>
</policy-violation>
<policy-violation>
  <id>268</id>
  <name>CPU utilization is too high</name>
  <startTimeInMillis>1452630655000</startTimeInMillis>
  <detectedTimeInMillis>0</detectedTimeInMillis>
  <endTimeInMillis>1452630715000</endTimeInMillis>
  <incidentStatus>RESOLVED</incidentStatus>
  <severity>WARNING</severity>
  <triggeredEntityDefinition>
    <entityType>POLICY</entityType>
    <entityId>30</entityId>
    <name>CPU utilization is too high</name>
  </triggeredEntityDefinition>
  <affectedEntityDefinition>
    <entityType>APPLICATION_COMPONENT_NODE</entityType>
    <entityId>20</entityId>
    <name>FulfillmentClient</name>
  </affectedEntityDefinition>
  <deepLinkUrl>http://demo.appdynamics.com/controller/#location=APP_INCIDENT_DETAIL&amp;incident=268<
  /deepLinkUrl>
  <description>AppDynamics has detected a problem with Node &lt;b>FulfillmentClient&lt;/b>. &lt;br>
  &lt;b>CPU utilization is too high&lt;/b> started violating and is now &lt;b>warning&lt;/b>.
  &lt;br>All of the following conditions were found to be violating&lt;br>For Node &lt;b>
  FulfillmentClient&lt;/b>: &lt;br>1) Hardware Resources|CPU|%Busy Condition&lt;br>&lt;b>%
  Busy's&lt;/b> value &lt;b>76.0&lt;/b> was &lt;b>greater than&lt;/b> the threshold &lt;b>
  &lt;br>75.0&lt;/b> for the last &lt;b>30&lt;/b> minutes&lt;br>&lt;/description>
</policy-violation>
</policy-violations>

```

## Retrieve Event Data

You can capture data for the event types listed in the event-types parameter.

### URI

/controller/rest/applications/*application\_id*events

### Input Parameters

Parameter Name	Parameter Type	Value	Mandatory
<i>application_id</i>	URI	Provide either the application name or application id.	Yes
time-range-type	Query	<p>Possible values are:</p> <p><b>BEFORE_NOW</b> To use the "BEFORE_NOW" option, you must also specify the "duration-in-mins" parameter.</p> <p><b>BEFORE_TIME</b> To use the "BEFORE_TIME" option, you must also specify the "duration-in-mins" and "end-time" parameters.</p> <p><b>AFTER_TIME</b> To use the "AFTER_TIME" option, you must also specify the "duration-in-mins" and "start-time" parameters.</p> <p><b>BETWEEN_TIMES</b> To use the "BETWEEN_TIMES" option, you must also specify the "start-time" and "end-time" parameters. The "BETWEEN_TIMES" range includes the start-time and excludes the end-time.</p>	Yes
duration-in-mins	Query	Specify the duration (in minutes) to return the metric data.	If time-range-type is <b>BEFORE_NOW</b> , <b>BEFORE_TIME</b> , or <b>AFTER_TIME</b>
start-time	Query	Specify the start time (in milliseconds) from which the metric data is returned.	If time-range-type is <b>AFTER_TIME</b> or <b>BETWEEN_TIMES</b>
end-time	Query	Specify the end time (in milliseconds) until which the metric data is returned.	If time-range-type is <b>BEFORE_TIME</b> or <b>BETWEEN_TIMES</b>
event-types	Query	Specify the comma-separated list of event types for which you want to retrieve event information. See the <a href="#">Events Reference</a> for the valid event types.	Yes
severities	Query	<p>Specify the comma-separated list of severities for which you want to retrieve event information.</p> <p>The severities are:</p> <ul style="list-style-type: none"> <li>• INFO</li> <li>• WARN</li> <li>• ERROR</li> </ul>	Yes
output	Query	HTTP Request parameter included as part of the URL to change the output format. Valid values are "XML" (default) or "JSON".	No

## Example

Retrieve the list of events of type "APPLICATION\_ERROR" or "DIAGNOSTIC\_SESSION" of any severity that occurred in the specified time range:

```
curl --user user1@customer1:secret http://demo.appdynamics.com//controller/rest/applications/6/events?
time-range-type=BEFORE_NOW\&duration-in-mins=30\&event-types=%20APPLICATION_ERROR,
DIAGNOSTIC_SESSION\&severities=INFO,WARN,ERROR
```

```
<events><event>
  <id>44658</id>
  <type>DIAGNOSTIC_SESSION</type>
  <subType>ERROR_DIAGNOSTIC_SESSION</subType>
  <eventTime>1451343453085</eventTime>
  <severity>WARN</severity>
  <summary>Starting Diagnostic Session after series of errors for a Business Transaction 18% (2/11)
of requests had errors in the last minute starting 12/28/15 10:57 PM local time</summary>
  <affectedEntities>
    <entity-definition>
      <entityType>APPLICATION</entityType>
      <entityId>6</entityId>
      <name>ECommerce</name>
    </entity-definition>
    <entity-definition>
      <entityType>APPLICATION_COMPONENT</entityType>
      <entityId>11</entityId>
      <name>ECommerce-Services</name>
    </entity-definition>
    <entity-definition>
      <entityType>APPLICATION_COMPONENT_NODE</entityType>
      <entityId>19</entityId>
      <name>ECommerce_WEB2</name>
    </entity-definition>
    <entity-definition>
      <entityType>BUSINESS_TRANSACTION</entityType>
      <entityId>35</entityId>
      <name>/items/all.GET</name>
    </entity-definition>
    <entity-definition>
      <entityType>MACHINE_INSTANCE</entityType>
      <entityId>8</entityId>
      <name>ECommerce-web1</name>
    </entity-definition>
  </affectedEntities>
  <triggeredEntity>
    <entityType>APPLICATION_COMPONENT_NODE</entityType>
    <entityId>19</entityId>
    <name>ECommerce_WEB2</name>
  </triggeredEntity>
  <markedAsRead>>false</markedAsRead>
  <markedAsResolved>>false</markedAsResolved>
  <archived>>false</archived>
  <deepLinkUrl>http://demo.appdynamics.com:8090/controller/#location=APP_EVENT_VIEWER_MODAL&amp;
eventSummary=44658</deepLinkUrl>
</event>
</events>
```

## Create Events

Application deployment events notify AppDynamics when you upgrade your application, push new code, etc. This lets you correlate these application deployment activities with other data inside AppDynamics. This is useful for regression analysis, root cause analysis, and performance studies. A useful practice is to include injection of your application deployment event into AppDynamics as part of the build process for deploying a new version of your application.

The AppDynamics REST API lets you integrate events of type "APPLICATION\_DEPLOYMENT" with other systems.

For example, suppose you want to create an event automatically in your AppDynamics monitored system for every new release. To integrate these systems, use the following REST API to create an event of type "APPLICATION\_DEPLOYMENT" in your managed environment.

You should receive the event ID after successful invocation of the request.

## URI

POST /controller/rest/applications/*application\_id*events

### Input parameters

Parameter Name	Parameter Type	Value	Mandatory
<i>application_id</i>	URI	Provide either application name or application id.	Yes
summary	Query	Provide the summary for the event.	Yes
comment	Query	Provide the comments (if any) for the event.	No
eventtype	Query	APPLICATION_DEPLOYMENT	Yes
severity	Query	Provide a severity level. Allowed values <ul style="list-style-type: none"> <li>• "INFO"</li> <li>• "WARN"</li> <li>• "ERROR"</li> </ul> In the UI, these become "Info", "Warning", and "Critical"	Yes

## Create a Custom Event

You can create custom events to be reported in the AppDynamics event viewer and in the events panels on the AppDynamics dashboards. See [Monitor Events](#) to learn how to filter on your custom events so that you can find them. Then you can create alerts triggered by these events as you do for AppDynamics standard events.

You should receive the event ID after successful invocation of the request.

## URI

POST /controller/rest/applications/*application\_id*events

### Input parameters

Parameter Name	Parameter Type	Value	Mandatory
application_id	URI	Provide either application name or application id.	Yes
summary	Query	Provide a summary describing the event.	Yes
comment	Query	Provide a comment for the event.	No
severity	Query	Provide a severity level. Allowed values <ul style="list-style-type: none"> <li>• "INFO"</li> <li>• "WARN"</li> <li>• "ERROR"</li> </ul> In the UI, these become "Info", "Warning", and "Critical"	Yes
eventtype	Query	CUSTOM	Yes
customeventtype	Query	Provide a name for the "type"; for example, the source, like "nagios"	No
node	Query	Provide the affected node name	No

tier	Query	Provide the affected tier name	Yes, if node and bt are specified
bt	Query	Provide the affected business transaction name	No
propertynames	Query	Provide a property name as a pair, i.e., the "key"	No, but if one element of the pair is defined, the other must be defined also
propertyvalues	Query	Provide the property value as a pair, i.e., the "value"	No, but if one element of the pair is defined, the other must be defined also

### Example

```
curl -X POST --user user1@customer1:secret 'http://demo.appdynamics.com/controller/rest/applications/5/
events?
severity=INFO&summary=test1&eventtype=CUSTOM&customeventtype=mycustomevent&propertynames=key1&property
names=key2&propertyvalues=value1&propertyvalues=value'
```

Note the pattern for custom properties: propertynames and propertyvalues get matched up by order position, so to set N property values, you need N occurrences of propertynames and N occurrences of propertyvalues.

## Create Custom URLs for Notifications

Single tenants in a multi-tenant Controller instance should use this API method to specify a custom "vanity" URL for notification purposes. So instead of a URL such as paid8.appdynamics.com being displayed as the host, the custom URL can be displayed as something like "mycompany.appdynamics.com" in the notification.

### URI

POST /controller/rest/accounts/*customer\_name*/update-controller-url

### Input parameters

Parameter Name	Parameter Type	Value	Mandatory
customer_name	URI	The customer account name	Yes

### Body Parameter

As Application/JSON content:

```
{
  "controllerURL": "http://<my-custom-hostname:port>"
}
```



If the URL in the alerts is invalid, you can set it using the following curl command:

```
curl -k --basic --user root@system --header "Content-Type: application/json" --data '{
"controllerURL": "http://<controller>:<port>" }' http://<controller>:<port>/controller/rest
/accounts/<ACCOUNT-NAME>/update-controller-url
```

For example:

```
curl -k --basic --user root@system --header "Content-Type: application/json" --data '{
"controllerURL": "https://myVIP:443" }' https://myhost:8181/controller/rest/accounts/customer1
/update-controller-url
```

There is no need to reset the controller. Upgrading the controller will reset the deeplink URL settings.

## Create and Delete Action Suppressions

By default any response is in JSON, although XML can be requested by using the following header:

Name : Accept  
Value : application/vnd.appd.cntrl+xml;v=1

## Retrieve All Existing Action Suppressions

Gets a list of all existing action suppressions.

### URI

GET /controller/api/accounts/*account\_id*/applications/*application\_id*/actionsuppressions

### Input parameters

Parameter Name	Parameter Type	Value	Mandatory
<i>account_id</i>	URI	The account ID	Yes
<i>application_id</i>	URI	The application ID	Yes

### Example request to get all action suppressions:

```
/controller/api/accounts/2/applications/9/actionsuppressions
```

### Example response:



```
Status : 200 ok
Output Data :
{"actionSuppressions": [{"id": "15", "name": "App-ASW", "timeRange": {"startTimeMillis": "2014-10-25T04:16:30+0000", "endTimeMillis": "2014-10-25T06:16:30+0000"}, "affects": {"type": "APP"}}, {"id": "16", "name": "Node-ASW", "timeRange": {"startTimeMillis": "2014-10-25T04:16:57+0000", "endTimeMillis": "2014-10-25T05:16:57+0000"}, "healthRuleIds": [60, 61], "affects": {"type": "NODE", "nodeAffectedEntities": {"type": "SPECIFIC", "nodeType": "ALL", "nodes": [17, 18]}}}], "actions": [{"href": "http://demo.appdynamics.com:8090/controller/api/accounts/2/applications/9/actionsSuppressions/%7BactionsSuppressions.id%7D/%7Bactions.name%7D", "method": ["POST", "DELETE"], "name": "enabled"}], "links": [{"href": "http://ec2-54-80-163-175.compute-1.amazonaws.com:8090/controller/api/accounts/2/applications/9/actionsSuppressions/%7BactionsSuppressions.id%7D", "name": "actionsSuppressions"}]}
```

## Retrieve a Specific Action Suppression by ID

Get the action suppression by specified ID.

### URI

`/controller/api/accounts/account_id/applications/application_id/actionsSuppressions/actionsSuppression_id`

### Input parameters

Parameter Name	Parameter Type	Value	Mandatory
<i>account_id</i>	URI	The account id	Yes
<i>application_id</i>	URI	The application id	Yes
<i>actionsSuppressions_id</i>	URI	The action suppression id	Yes

### Example request:

```
/controller/api/accounts/2/applications/9/actionsSuppressions/15
```

### Example response:

```
Status : 200 ok
Output Data :
{"id": "15", "name": "App-ASW", "timeRange": {"startTimeMillis": "2014-10-25T04:16:30+0000", "endTimeMillis": "2014-10-25T06:16:30+0000"}, "affects": {"type": "APP"}}
```

## Create a New Action Suppression

This is a POST request. Should return a 201 - created response.

### URI


POST /controller/api/accounts/*account\_id*/applications/*application\_id*/actions suppressions

### Input parameters

Parameter Name	Parameter Type	Value	Mandatory
account_id	URI	The account id	Yes
application_id	URI	The application id	Yes
name	body key	The name of the action suppression window	Yes
timeRange	body key	The start and end time of the window Includes: startMillis, eg 2014-10-25T04:16:57+0000 endMillis, eg 2014-10-25T05:16:57+0000	Yes
healthRuleIds	body key	The ids of the affected health rules. If not provided, all rules affected	No
affects	body key	Type of entity and corresponding ids (see below)	Yes

### Content of "affects"

Scope	Type	Value	Example
Application	APP	Covers the entire application	"affects": {"type": "APP"}
Business Transaction	BT	Covers one or more Business Transactions	
		All Business Transactions	"affects": {"type": "BT", "btAffectedEntities": {"type": "ALL"}}
		Business Transactions from specific tiers	"affects": {"type": "BT", "btAffectedEntities": {"type": "WITHIN_TIERS", "tiers": [11,12]}} where 11,12 are Tier Ids
		Specific Business Transactions by id	"affects": {"type": "BT", "btAffectedEntities": {"type": "SPECIFIC", "bts": [1,2]}} where 1,2 are BT Ids
		Business Transactions that match criteria	"affects": {"type": "BT", "btAffectedEntities": {"type": "CRITERIA", "matchesOperator": "CONTAINS", "matchesValue": "pojo"}} where "matchesOperator" can be: <ul style="list-style-type: none"> <li>CONTAINS</li> <li>EQUALS</li> <li>STARTS</li> <li>ENDS</li> <li>REGEX_VALUE</li> </ul>
Tier	TIER	Covers one or more tiers	
		All tiers	"affects": {"type": "TIER", "tierAffectedEntities": {"type": "ALL"}}
		Specific tiers	"affects": {"type": "TIER", "tierAffectedEntities": {"type": "SPECIFIC", "tiers": [11,12]}} where 11,12 are Tier Ids
Node	NODE	Covers one or more nodes	
		All nodes	"affects": {"type": "NODE", "nodeAffectedEntities": {"type": "ALL", "nodeType": "ALL"}}
		Nodes belonging to specific tiers	"affects": {"type": "NODE", "nodeAffectedEntities": {"type": "WITHIN_TIERS", "nodeType": "ALL", "tiers": [11,12]}} where 11,12 are Tier Ids
		Specific nodes	"affects": {"type": "NODE", "nodeAffectedEntities": {"type": "SPECIFIC", "nodeType": "ALL", "nodes": [9,10]}} where 9,10 are Node Ids

		Nodes that match criteria	<p>"affects": {"type": "NODE", "nodeAffectedEntities": {"type": "NAME_CRITERIA", "nodeType": "ALL", "nameMatchesOperator": "EQUALS", "nameMatchesValue": "Node"}} - <b>String match</b></p> <p>"affects": {"type": "NODE", "nodeAffectedEntities": {"type": "PROPERTY_CRITERIA", "nodeType": "ALL", "metaInfoProperties": [{"name": "ProcessID", "value": "12343"}]}} - <b>Meta Info Properties match</b></p> <p>where "matchesOperator" can be:</p> <ul style="list-style-type: none"> <li>CONTAINS</li> <li>EQUALS</li> <li>STARTS</li> <li>ENDS</li> <li>REGEX_VALUE</li> </ul>
Machine	MACHINE	Covers one or more machines	<p>"affects": {"type": "MACHINE", "machineAffectedEntities": {"type": "SPECIFIC", "machines": [4,5]}} where 4,5 are Machine Ids</p> <p> note you must spell the value as "SPECIFIC" due to a typo in the underlying code.</p>

## Example request

```
/controller/api/accounts/2/applications/9/actions suppressions
```

## Header

- Name: Content-Type
- Value: application/vnd.appd.cntrl+json;v=1

## Body

```
{ "name": "App-ASW_2", "timeRange": { "startTimeMillis": "2014-10-25T04:16:30+0000", "endTimeMillis": "2014-10-25T06:16:30+0000" }, "affects": { "type": "APP" } }
```

or

```
{ "name": "Node-ASW_1", "timeRange": { "startTimeMillis": "2014-10-25T04:16:57+0000", "endTimeMillis": "2014-10-25T05:16:57+0000" }, "healthRuleIds": [60,61], "affects": { "type": "NODE", "nodeAffectedEntities": { "type": "SPECIFIC", "nodeType": "ALL", "nodes": [17,18] } } }
```

## Delete a Specific Action Suppression by ID

This is a DELETE request. Should return a 204 - No Content.

## URI

DELETE /controller/api/accounts/*account\_id*applications/*application\_id*actions suppressions/*actions suppression\_id*

## Input parameters

Parameter Name	Parameter Type	Value	Mandatory
<i>account_id</i>	URI	The account id	Yes
<i>application_id</i>	URI	The application id	Yes
<i>actionsuppression_id</i>	URI	The id of the action suppression to be deleted	Yes