

<b>Introduction</b>	<b>1</b>
<b>How Can I Verify If I Am Impacted?</b>	<b>1</b>
1. Number Elements in WSDL/XML	2
2. Metadata Level Restructuring	2
Current Behavior Creating a Rule on Named Credential:	3
New Behavior:	3
3. Node Names - Singular vs Plural	4
4. Scan Events on Commit/Deployment	4
<b>Instructions</b>	<b>5</b>
<b>Troubleshooting</b>	<b>7</b>

## Introduction

Copado is working on several enhancements in **Copado Compliance Hub** that will be introduced as part of a backend release scheduled for Monday, November 30th, 2020. In its constant desire for improvement, some significant refactors and architectural changes are being made in **Copado Compliance Hub** to make it faster, more robust and more dynamic to scale in the future.

Please read this information carefully, as this enhancement will require that you follow some specific instructions.

## How Can I Verify If I Am Impacted?

Since some internal changes have been done, you will need to take actions on your side to be able to continue using your rule sets after the release. Copado will provide Apex scripts and instructions to migrate rules that are impacted by cases 2 and 3 (see chart below). Alternatively, you can delete your criteria and recreate your rules.

These are the cases that may impact you and their corresponding solutions:

Cases	Solution
1. Integer/Number elements that don't exist in the XML will behave as 0s.	The following <a href="#">KI-00324</a> has been created.
2. Metadata Levels Restructuring*	Copado will provide an Apex script to fix the impacted rules.
3. Node Names - Singular vs plural*	Copado will provide an Apex script to fix the impacted rules.
4. Scan Events on Commit/Deployment	Preemptively deactivate rules or remove the scan events

Now, let's take a closer look at each of these cases and the solution that Copado is providing.

## 1. Number Elements in WSDL/XML

When a "number" element is null in the XML, the Salesforce library that Copado uses returns "0" instead of "null". This may result in false positives in Compliance Hub findings for certain rules. You can follow this [KI-00324](#). Once fixed, Copado will communicate it on the Copado Updates group in the Success community.

## 2. Metadata Level Restructuring

There were 4 metadata types being represented as "1 Level" instead of "2 level":

- Certificate
- CspTrustedSite
- NamedCredential
- SamlSsoConfig

This means that instead of finding these metadata types under the **Node** dropdown, these were being hardcoded within the **Field** dropdown.

### Example

NamedCredential metadata

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <NamedCredential xmlns="http://soap.sforce.com/2006/04/metadata">
3   <allowMergeFieldsInBody>false</allowMergeFieldsInBody>
4   <allowMergeFieldsInHeader>false</allowMergeFieldsInHeader>
5   <endpoint>http://google.com</endpoint>
6   <generateAuthorizationHeader>true</generateAuthorizationHeader>
7   <label>CCH_NamedCred</label>
8   <principalType>Anonymous</principalType>
9   <protocol>NoAuthentication</protocol>
10 </NamedCredential>

```

## Current Behavior Creating a Rule on Named Credential:

**Node:** Contains Name and NamedCredential (redundant with parent metadata).

Criteria Selection

Node	Field
<input checked="" type="checkbox"/> --None-- <input type="checkbox"/> name <input type="checkbox"/> NamedCredential	--None--
	--None--

**Field:** contains the metadata elements that should be under **Node**:

Criteria Selection

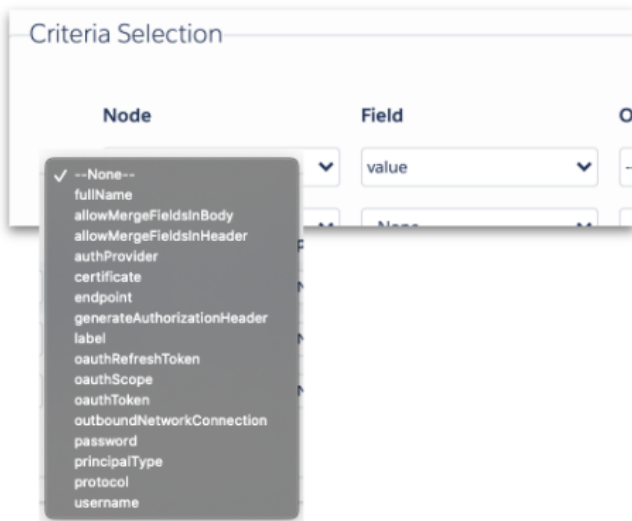
Node	Field
NamedCredential	
--None--	
--None--	

--None--  
 fullName  
 allowMergeFieldsInBody  
 allowMergeFieldsInHeader  
 authProvider  
 certificate  
 endpoint  
 generateAuthorizationHeader  
 label  
 oauthRefreshToken  
 oauthScope  
 oauthToken  
 outboundNetworkConnection  
 password  
 principalType  
 protocol  
 username

[Add Row](#)  
[Add Filter Logic](#)

## New Behavior:

The **Node** dropdown will contain all metadata elements. The **Field** dropdown will be **Value**:



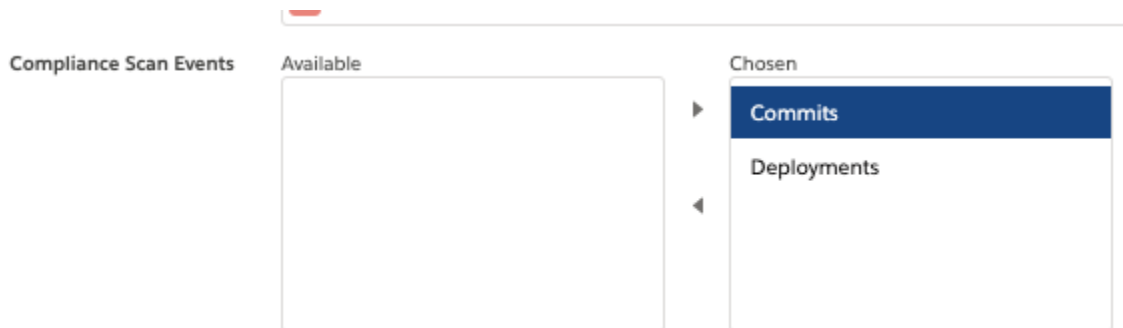
### 3. Node Names - Singular vs Plural

There were multiple elements with wrong and hardcoded names in singular, while in the API they are represented in plural, within these metadata types:

- Profile
- Certificate
- CustomObject
- CspTrustedSite
- NamedCredential
- Network
- PermissionSet
- SamlSsoConfig
- SharingRules
- AddressSettings
- CaseSettings
- ForecastingSettings
- IdeasSettings
- MobileSettings

### 4. Scan Events on Commit/Deployment

If you have configured **Compliance Scan Events** (see image below) in your environments for commit and/or deployment, any commit (user story, snapshot, etc.) and deployment operations against those environments will be affected by this release, because compliance scans will be executed in those operations:



In order to avoid issues with commits and deployments until you run the scripts provided, we recommend that, as close to the release window as possible\*, you either:

1. Deactivate your compliance rules or
2. Remove **Commits** and **Deployments** from the **Compliance Scan Events** picklist in your environments.

Once the release is live and after you run the scripts, reactivate your compliance rules if you have chosen option (1) or add **Commits** and/or **Deployments** to the **Compliance Scan Events** field if you have chosen (2).

*\*Release window: - Customers on EU Servers: Monday at 5pm Eastern time (11pm CET). - Customers on US Servers: Monday at 9pm Eastern time (3am CET).*

## Instructions

In order to migrate the rules with singular nodes to plural nodes, you have to follow these steps:

1. Perform a backup of your compliance rules and criteria. We recommend exporting the following fields:
  - a. copado\_\_Compliance\_Rule\_\_c
    - i. Id
    - ii. name
    - iii. copado\_\_Action\_\_c
    - iv. copado\_\_Active\_\_c
    - v. copado\_\_Error\_Message\_\_c
    - vi. copado\_\_Filter\_Criteria\_\_c
    - vii. copado\_\_Is\_Valid\_\_c
    - viii. copado\_\_Last\_Validation\_Status\_Message\_\_c
    - ix. copado\_\_Matching\_Criteria\_\_c
    - x. copado\_\_Metadata\_Type\_\_c
    - xi. copado\_\_Record\_Count\_\_c
    - xii. copado\_\_Record\_Count\_Criteria\_\_c

- xiii. copado\_\_Risk\_Details\_\_c
- xiv. copado\_\_Severity\_\_c

### Query

```

Select          id,          name,
copado__Action__c,copado__Active__c,copado__Error_Message__c,copado__
_Filter_Criteria__c,copado__Is_Valid__c,copado__Last_Validation_Status_Me
ssage__c,copado__Matching_Criteria__c,copado__Metadata_Type__c,
copado__Record_Count__c,copado__Record_Count_Criteria__c,copado__Ri
sk_Details__c, copado__Severity__c
from copado__Compliance_Rule__c

```

- b. copado\_\_Compliance\_Rule\_Criteria\_\_c
  - i. Id
  - ii. Name
  - iii. copado\_\_Compliance\_Rule\_\_c
  - iv. copado\_\_Compliance\_Rule\_\_r.name
  - v. copado\_\_Criteria\_\_c
  - vi. copado\_\_Field\_\_c
  - vii. copado\_\_Value\_\_c
  - viii. copado\_\_Order\_\_c
  - ix. copado\_\_Field\_Type\_\_c
  - x. copado\_\_Node\_\_c
  - xi. copado\_\_Operator\_\_c

### Query

```

Select          id,          name,          copado__Compliance_Rule__c,
Copado__Compliance_Rule__r.name,
copado__Criteria__c,copado__Field__c,copado__Field_Type__c,copado__No
de__c,copado__Operator__c,copado__Order__c,copado__Value__c
from copado__Compliance_Rule_Criteria__c

```

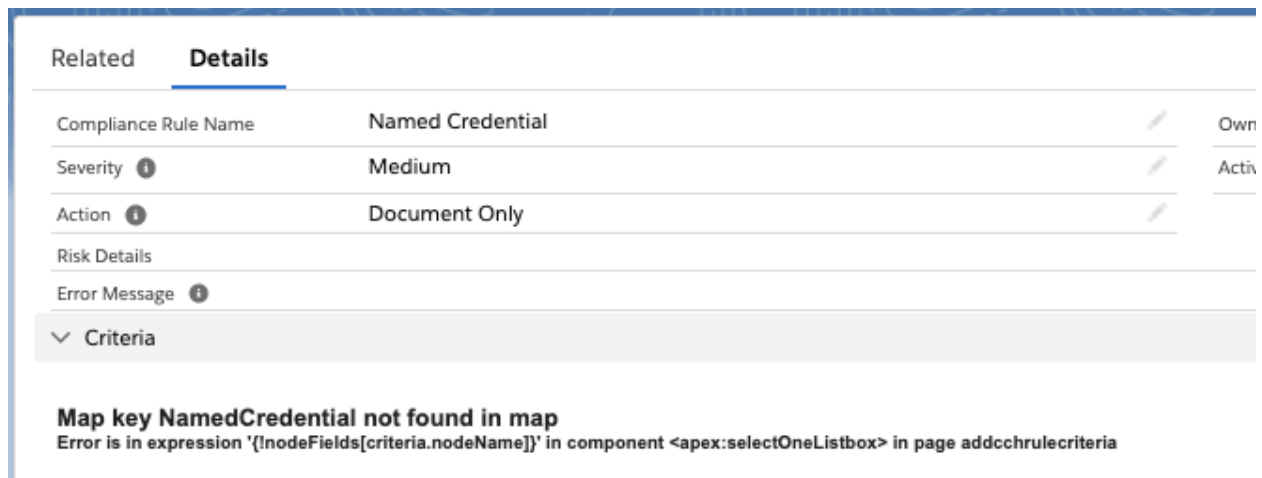
2. From Workbench or the Developer Console of the org where your compliance rules have been configured, execute the following scripts in the **specified order** (make sure you have the necessary accesses to perform these operations):
  - a. [Script 1 - "fix compliance rules 1.txt"](#)
  - b. [Script 2 - "fix compliance rules 2.txt"](#)
  - c. [Script 3 - "fix compliance rules 3.txt"](#)

3. After running the 3 scripts your rules should be successfully updated.

Alternatively, you can delete your rule's criteria and recreate them within your rules.

## Troubleshooting

If after executing the scripts you continue to see the following or a similar error message in your compliance rules (see image below), it's likely that the compliance rule criteria in your compliance rule has not been properly updated.



The screenshot shows a 'Details' tab for a compliance rule. The rule name is 'Named Credential', severity is 'Medium', and action is 'Document Only'. Below these fields is a section for 'Criteria' which is currently collapsed. An error message is displayed below the criteria section: 'Map key NamedCredential not found in map. Error is in expression '!NodeFields[criteria.nodeName]!' in component <apex:selectOneListbox> in page addcchrulecriteria'.

In such cases you need to delete all the associated compliance rule criteria and re-configure your compliance rule's criteria from the **Criteria Selection** section.

To simplify the process of deleting all **Compliance Rule Criteria** records related to a **Compliance Rule** record, you can use the following script by replacing <RULE\_ID> with the corresponding Salesforce record ID:

```
delete [select id from copado__Compliance_Rule_Criteria__c where copado__Compliance_Rule__c = '<RULE_ID>'];
```

If you continue seeing an error message, please reach out to your CSM or Copado Support if needed.