

Compliance Reporting

Basics

The Compliance Reporting feature automatically validates whether network device configurations and/or their runtime states conform to operational policies. The Compliance Engine analyzes the latest configuration backups or Mass config push/pull outputs against user-defined rules and flags any deviations. Compliance checks in Unimus are organized into **Compliance presets**.

Compliance presets

Each Compliance preset consists of three core components:

1. **Source** – the dataset against which compliance is validated.
2. **Targets** – the devices validated by the preset.
3. **Compliance Rules** – the logic that defines compliance criteria.

The screenshot displays the Unimus Compliance Reporting interface. At the top, the compliance status is shown as "Non compliant" in red. The preset name is "ROS, FW, Config versions". The source is set to "Mass config push result". The targets are listed as "Targets: 29". The interface includes buttons for "Save", "Delete", "Show preset results", and "Execute on targets". Below the preset configuration, there is a table of rules and a detailed view of a condition.

Rule name	Status	Conditions	Failed conditions
ROS	Failed	1	1
FW	Failed	1	1
Reboot pending	Successful	1	0
Config version	Failed	1	1

Condition details for "Reboot pending":

- 1. Condition: Successful
- Condition type: Text does not contain
- Specify text: 1 reboot for changes to take effect

This structure allows you to define what is checked, how it is checked, and on which devices.

Compliance source

The Source determines which data the Compliance Engine validates against your rules. You can choose from:

- **Last Backup** – validates against the most recent configuration backup of devices.
- **Config search result** – validates the configuration of devices returned by a Saved search.
- **Mass config push result** – validates device output produced by executing an MCP preset.

Compliance targets

Targets are the devices whose compliance state you want to monitor. The selected data source affects how the targets are determined.

When the source of a preset is set to "Last backup," you can select devices individually or target groups of devices based on vendor, device type, or custom tags.

For Compliance presets where the source is set to "Config Search result," the targeted devices are defined by the result of a Saved Search. The

Saved Search runs against a group of devices, and only devices whose configurations match the search criteria are targeted.

For presets where the source is set to “Mass config push result,” the targeted devices are defined by the targets of the selected MCP preset.

By default, unmanaged devices are excluded from validation. To include them, enable the Evaluate unmanaged devices toggle within the preset.

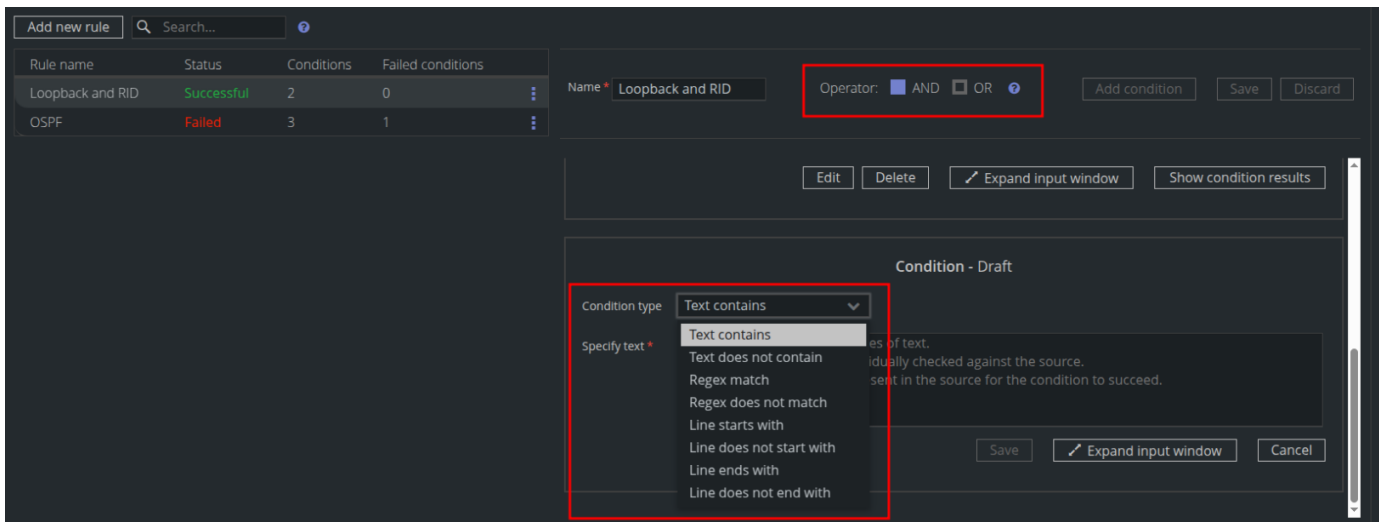
Note: Only one Saved Search or one MCP preset can be selected per Compliance preset. Only Saved Searches performed on the latest device configurations are considered a valid source for a Compliance preset.

Compliance rules and conditions

Compliance presets let you organize and apply your custom compliance rules across selected devices. Each preset contains one or more rules, and each rule contains one or more conditions.

Unimus supports creating complex rules using:

- **Text Matching** (“text contains” or “text does not contain”)
- **Regular Expressions** for advanced matching
- **Line Anchors** (e.g. “line starts with”, “line ends with”, etc.)
- **Multiple Conditions per Rule**, evaluated using a single logical operator (AND/OR) selected by the user (either all device condition results must match for a device within a rule, or any of them)



A rule can be named for quick identification or context, and it can be disabled to be ignored during the execution of the Compliance preset.

Condition evaluation logic

Each line within a Condition is evaluated **individually**. This allows you to paste multiple commands into a single Condition, with each line evaluated individually against the target device sources. The most basic use case is validating a device’s configuration against a “Golden Config”—you can paste the entire Golden Config into one Condition, and Unimus will check each line against the device.

The selected operator (AND/OR) determines how multiple Conditions are evaluated. For example, if multiple versions of a Golden Config are acceptable, you can create separate Conditions for each version, set the Operator to **OR**, and paste each configuration into its own Condition. Unimus will then validate devices against all acceptable configurations.

Compliance preset execution

By default, Compliance presets are executed **manually** by clicking Execute on targets.

For continuous compliance monitoring, Unimus supports **Automatic Preset Execution**. When enabled (by toggling “Automatic execution” within a preset) Unimus automatically validates new sources for all targeted devices as soon as they are created. This keeps compliance results up to date without requiring manual execution.

Compliance evaluation levels

The Compliance engine evaluates compliance across several levels. Each evaluation level produces its own Compliance result. For the full evaluation logic, see the [Compliance Evaluation Logic](#) article.

Evaluation level result	What It Represents	Scope
Preset Status	Result of evaluating an entire Compliance preset across all its target devices.	All devices targeted, one preset
Rule Status	Result of evaluating one Compliance rule across all target devices in a preset.	All targeted devices, one rule
Condition Status	Result of evaluating one Compliance condition across all target devices in a preset.	All targeted devices, one condition
Device Compliance Status	Overall compliance status of a device across <i>all</i> Compliance presets.	One device, all presets
Device Preset Result	Evaluation of all rules within a preset for one specific device.	One device, one preset
Device Rule Result	Evaluation of all conditions in a rule for one specific device.	One device, one rule
Device Condition Result	Evaluation of a single condition on a single device.	One device, one condition

Viewing Compliance results

- **Preset Status** – Visible on the *Compliance Home* screen for each preset. Also shown in the preset detail view after opening a preset.
- **Rule Status** – After opening a preset from the *Compliance Home*, displayed in the table of rules.
- **Condition Status** – After opening a preset, displayed in the list of conditions next to each condition.

The screenshot displays a compliance management interface. At the top, the status is 'Non compliant' for the 'Firewall enabled' preset. Below this, a table shows the status of individual rules:

Rule name	Status	Conditions	Failed conditions
IPv4 firewall	Successful	1	0
IPv6 firewall	Failed	2	2
Rule 3	Failed	2	2

The detailed view of a condition shows it is 'Successful' and is a 'Regex match' condition. The condition type is 'Regex match' and the specify regex is:

```
1 Vip firewall filter
2 (?m)^add action=drop chain=input(log-prefix=".*?")?&
```

- **Device Compliance Status** – Shown in the *Compliance* column (Compliance status indicator) for each device in the Devices list.

The device compliance status indicator is color-coded for fast identification:

- **Green:** device is fully compliant
- **Red:** device is non-compliant
- **Yellow:** source dataset is missing or invalid
- **Grey:** device is unmanaged or hasn't been validated yet

The screenshot shows the 'Devices' page in the NetCore Unimus Advanced interface. A table lists several devices with columns for Address, Description, Running Job, Vendor, Type, Model, Zone ID, Last Job, and Compliance. The 'Compliance' column is highlighted with a red box, showing green and red indicators for different devices.

Address	Description	Running Job	Vendor	Type	Model	Zone ID	Last Job	Compliance
10.30.1.63	sw-lab3	None	MikroTik	RouterOS v7	CRS354-48G-4S+2Q+	0		Red
10.30.1.62	sw-lab2	None	MikroTik	RouterOS v7	CRS354-48G-4S+2Q+	0		Red
10.30.1.56	ap-m4	None	MikroTik	RouterOS v7	cAP ax	0		Green
10.30.1.55	ap-er1	None	MikroTik	RouterOS v7	cAP ax	0		Red

- **Device Preset Result** – Shown for each device x preset combination in the Compliance Results screen (the compliance grid), or after opening a preset and selecting **Show preset results**.

The screenshot shows the 'Compliance results' screen in the NetCore Unimus Advanced interface. It displays a grid of device compliance results across various categories. The 'Compliance' column is highlighted in green for compliant devices and red for non-compliant ones.

Device	Baseline	Core switches 40G ports	Edge router blackholes	No TEMP items	OSPF default non-origination	OSPF default origination	ROS, FW, Config v
10.30.1.33 @ 0 sw-access3	Compliant	-	-	Compliant	-	-	Compliant
10.30.1.32 @ 0 sw-access2	Compliant	-	-	Compliant	-	-	Compliant
10.30.1.31 @ 0 sw-access1	Compliant	-	-	Compliant	-	-	Compliant
10.30.1.22 @ 0 sw-sr2	Compliant	-	-	Non compliant	-	-	Compliant
10.30.1.21 @ 0 sw-sr1	Compliant	-	-	Non compliant	-	-	Compliant
10.30.1.14 @ 0 sw-core4	Compliant	-	-	Compliant	-	-	Compliant
10.30.1.13 @ 0 sw-core3	Compliant	-	-	Compliant	-	-	Compliant
10.30.1.12 @ 0 sw-core2	Compliant	Compliant	-	Compliant	-	-	Compliant
10.30.1.11 @ 0 sw-core1	Compliant	Compliant	-	Compliant	-	-	Compliant
10.1.0.22 @ 0 r-core2	Compliant	-	-	Non compliant	Compliant	-	Compliant
10.1.0.21 @ 0 r-core1	Compliant	-	-	Non compliant	Compliant	-	Compliant
10.1.0.2 @ 0 r-edge2	Compliant	-	Compliant	Non compliant	-	Compliant	Compliant
10.1.0.12 @ 0 vpn-ac2	Compliant	-	-	Non compliant	Compliant	-	Compliant
10.1.0.11 @ 0 vpn-ac1	Compliant	-	-	Non compliant	Compliant	-	Compliant
10.1.0.1 @ 0 r-edge1	Compliant	-	Compliant	Non compliant	-	Compliant	Compliant

- **Device Rule Result** – After opening a preset and selecting **Show preset results**, click a device and then **Show details** to view all rule results for that device.

Non compliant

Details for "10.1.0.21" (r-core1)
Zone ID: 0

Search... Expand all Collapse all

- Loopback and RID **Successful** Operator: AND
- OSPF **Failed** Operator: AND

- Device Condition Result** – After opening a preset, choose **Show preset results**, select a device, click **Show details** and **Expand all** to display all condition results.
 Alternatively, open a preset and use **Show condition results** for a specific condition.

Loopback and RID

Condition results for: 1. Condition

Search... Failed Missing source Invalid source Not executed Unmanaged Successful

Address	Description	Vendor	Type	Zone ID	Device condition status	Status
10.1.0.22	r-core2	MikroTik	RouterOS v7	0	Successful	●
10.1.0.21	r-core1	MikroTik	RouterOS v7	0	Successful	●
10.1.0.2	r-edge2	MikroTik	RouterOS v7	0	Successful	●
10.1.0.12	vpn-ac2	MikroTik	RouterOS v7	0	Successful	●
10.1.0.11	vpn-ac1	MikroTik	RouterOS v7	0	Successful	●
10.1.0.1	r-edge1	MikroTik	RouterOS v7	0	Successful	●