

Dynamic value substitution

Overview

Dynamic value substitution allows you to use variables as placeholders in CONTROL configuration settings. Variables are enclosed in double curly braces (e.g., `{{ variable_name }}`) and are automatically replaced with their actual values when applied to devices.

You can use dynamic value substitution in the following contexts:

- Default values for **Parameters** in Device Profile/Type configurations
- **Device Settings** values in Device Profile/Type configurations
- Integration service configurations for event handlers and other integrations

How Variables Work

Variables and their values are defined under the **Groups** menu. They can be:

- **Custom variables:** Manually defined within Groups
- **System variables:** Dynamically generated from Device object information and settings

For detailed information about configuring Groups and their variables, see the [Inventory Groups section](#).

Using Variables in Configuration

When a Device belongs to a Group that includes a defined variable, CONTROL automatically substitutes any matching variable placeholder with its actual value.

Example:

If a Device belongs to a Group with a variable named `network_name` set to `Zequence`, then:

- Any setting configured as `{{ network_name }}` will be replaced with `Zequence`
- If a Parameter's default value in a Device Profile/Type is set to `{{ network_name }}`, the platform will use `Zequence` when generating the device's default configuration

Variable Precedence and Weight

When multiple Groups define the same variable name, CONTROL uses the **Weight** value to determine precedence:

- Variables configured with **higher weights** take precedence over those with lower weights
- If a Device belongs to multiple Groups that define the same variable, the value from the variable with the highest weight will be used

Group variables ▲

Name	Value	Weight	Description	Delete?
<input type="text" value="ssid"/>	<input type="text" value="WIFI-Name"/>	<input type="text" value="1 (low)"/>	<input type="text"/>	<input checked="" type="checkbox"/> edit <input type="checkbox"/>
<input type="text" value="wpa_psk"/>	<input type="text" value="testing1234567890"/>	<input type="text" value="5 (middle)"/>	<input type="text"/>	<input checked="" type="checkbox"/> edit <input type="checkbox"/>

[+ Add group variables](#)

System-Generated Device Variables

The following variables are automatically generated from Device object properties and are available for use in dynamic value substitution:

Variable Name	Description
<code>device.name</code>	Name of the device
<code>device.description</code>	1st description of the device
<code>device.description2</code>	2nd description of the device
<code>device.description3</code>	3rd description of the device
<code>device.description4</code>	4th description of the device
<code>device.serial_number</code>	Serial number of the device
<code>device.serial_number_alt</code>	Alternate serial number of the device
<code>device.organization</code>	Name of the Device's assigned Organization
<code>device.organization_id</code>	ID of the Device's assigned Organization
<code>device.type_id</code>	ID of the Device's Type/Profile
<code>device.type.name</code>	Name of the Device's Type/Profile
<code>device.type.short_name</code>	Short name configured on the Type/Profile
<code>device.type.klass</code>	Class of device configured on the Type/Profile

Variable Name	Description
<code>device.manufacturer</code>	Manufacturer of the device
<code>device.unique_identifier</code>	Manufacturer Unique ID
<code>device.product_class</code>	Product class
<code>device.software_version</code>	Software version of the device
<code>device.hardware_version</code>	Hardware version of the device
<code>device.location_name</code>	Location name configured for the device (not normalized)
<code>device.location_id</code>	ID of the Location assigned to the device (normalized)
<code>device.location.name</code>	Name of the Location assigned to the device (normalized)
<code>device.location.short_name</code>	Short-name of the Location assigned to the device (normalized)
<code>device.longitude</code>	Longitude of the device
<code>device.latitude</code>	Latitude of the device
<code>device.username</code>	Device's management agent username
<code>device.password</code>	Device's management agent password
<code>device.update_frequency</code>	Update frequency interval configured on the device
<code>device.mac</code>	MAC address of the device
<code>device.address</code>	Management address of the device
<code>device.gateway_address</code>	Management gateway address or hostname

Examples

Example 1: Device Settings Substitution

If a device is configured with the following settings:

Connection and agent settings ▲

UUID: dab0061b-f19a-4a32-bf96-52c5c61e8df7

Certificate: -

Agent username:
Used on the agent's registration process and as a username for CWMP/TR-069 agents authentication. The device's UUID can be used as a username too.

Agent password: ***
Used on the agent's registration process and as a password for CWMP/TR-069 agents authentication.

Update frequency:
Remote agent update frequency. If blank the system will automatically request the configured frequency from the agent.

MAC address:

Management address:

Gateway IP address:

The following variable substitutions will be performed:

- `{{ device.username }}` → `agent-username`
- `{{ device.password }}` → `agent-password`
- `{{ device.update_frequency }}` → `600`
- `{{ device.address }}` → `10.0.0.1`

Example 2: Parameter Default Value

The following example shows dynamic value substitution configured as the default value of a Parameter:

General settings

Hostname:

NTP enabled:
Click on the text control to see the list of available options. Then you can type directly on the control to search and filter.

Uptime: 0 day(s), 23 hour(s), 56 minute(s), 8 second(s)

Revision #2

Created 2026-02-13 22:25:53 UTC by ipena@zequenze.com

Updated 2026-02-14 01:08:16 UTC by ipena@zequenze.com