NavigateWorx

NR500 Series
Industrial Cellular VPN Router

Application Note 055

TR069

Version: V1.0.0
Date: Jul 2020
Status: Confidential

©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

Directory

1. Introduction 3
   1.1 Overview 3
   1.2 Compatibility 3
   1.3 Version 3
   1.4 Corrections 3
2. Topology 4
3. Configuration 5
   3.1 Configuration on NR500 5
4. Control and Monitor NR500 6
   4.1 Reboot 6
   4.2 Factory Reset 6
   4.3 Syslog Upload 7
   4.4 Config Upload 7
   4.5 Config Update 8
   4.6 Firmware/APP Upgrade 8
   4.7 NTP Operation 9
   4.8 ActiveLink and Cellular Status 10

©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

1. Introduction

1.1 Overview

This document contains information regarding the configuration and use of TR069.

This guide has been written for use by technically competent personnel with a good understanding of the communications technologies used in the product, and of the requirements for their specific application.

1.2 Compatibility

This application note applies to:
Models Shown: NR500 series.
Firmware Version: V1.1.4(0c0c9fa) or newer
Other Compatible Models: None

1.3 Version

Updates between document versions are cumulative. Therefore, the latest document will include all the content of previous versions.

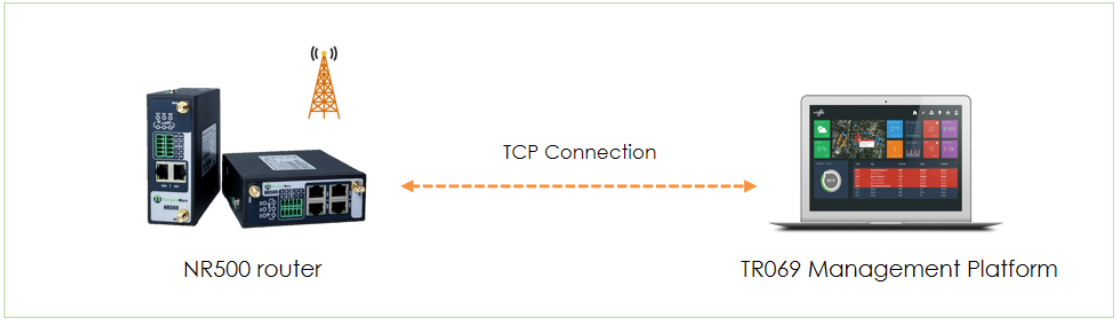
Release Date	Doc. Version	Firmware Version	Change Description
2020/07/17	V1.0.0	V1.1.4(0c0c9fa)	First released

1.4 Corrections

Appreciate for corrections or rectifications to this application note, and if any request for new application notes please email to: **support@navigateworx.com**

©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

2. Topology



1. NR500 router connect to the TR069 management platform.
2. TR069 management platform can do the monitoring or control the router. For example control the router restart, reset the router to factory default setting, upgrade the firmware/APPs/configuration, syslog upload, NTP configured, check the cellular, active link and NTP status.

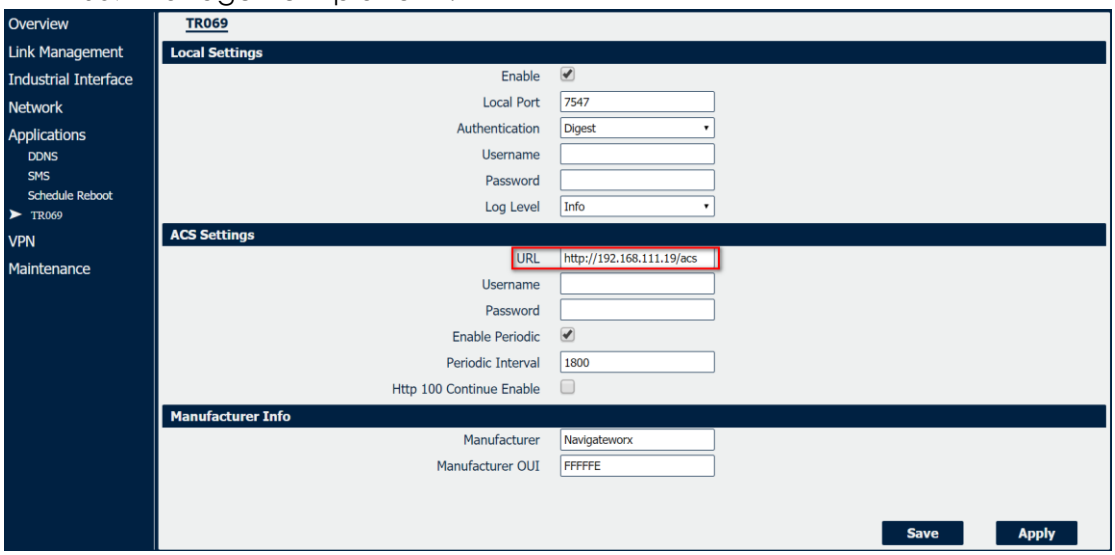
*Note: This Application Note is tested with "**XACS**" TR069 management platform.*

©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

3. Configuration

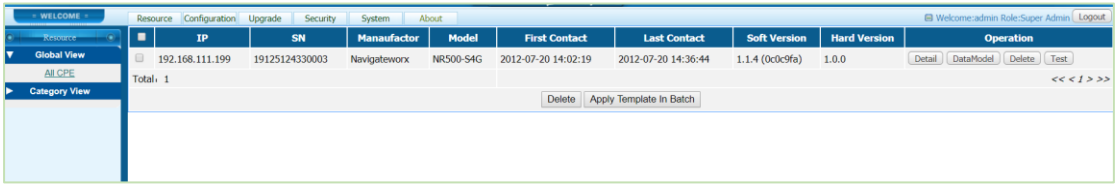
3.1 Configuration on NR500

1. Go to **Applications>TR069**, specify the settings to make the router connect to TR069 management platform:



Note: During the test without the authentication both on NR500(CPE) and TR069 Management Platform (XACS), so not need to set the username and password.

2. Login to the XACS, on the homepage we can see the router had connected to the platform successfully:

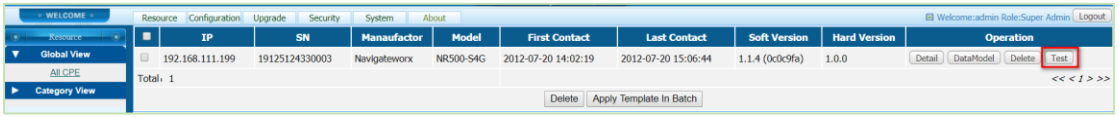


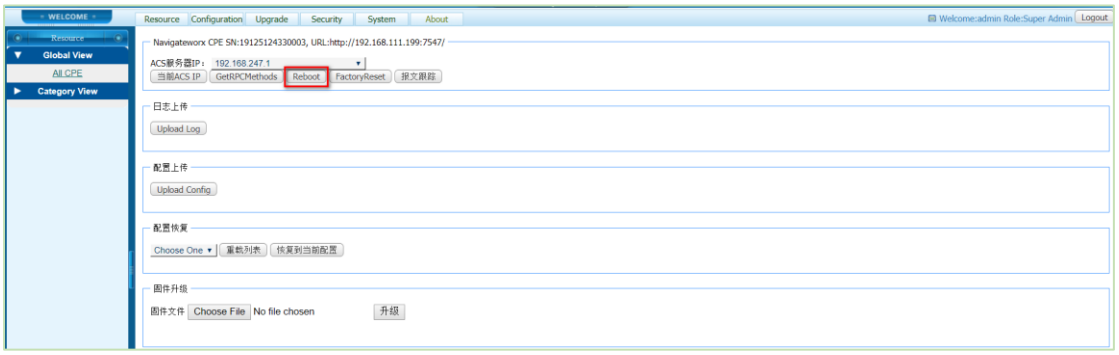
©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

4. Control and Monitor NR500

4.1 Reboot

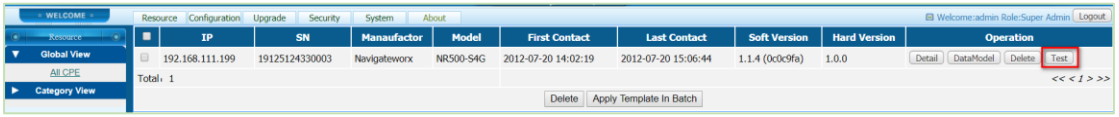
Login to the platform and go to **Resource>Test>Reboot**, the router will reboot when click the "Reboot" button:





4.2 Factory Reset

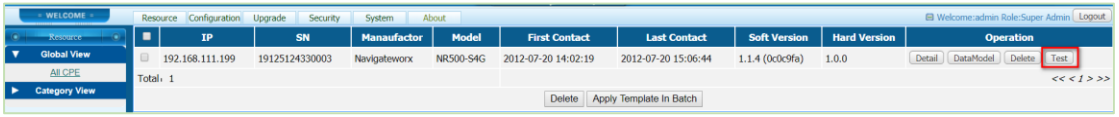
Login to the platform and go to **Resource>Test>FactoryReset**, the router will reset when click the "FactoryReset" button:

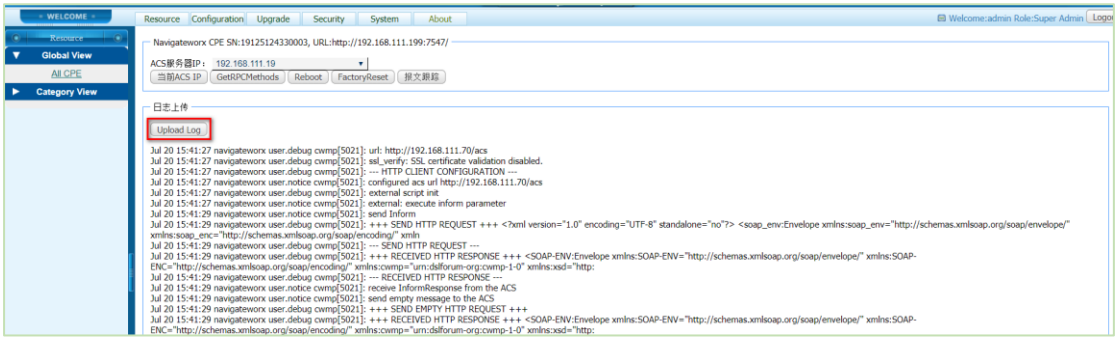


©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

4.3 Syslog Upload

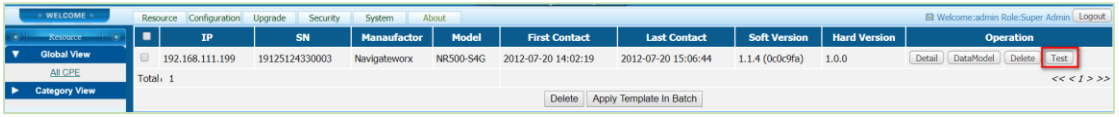
Login to the platform and go to **Resource>Test>Upload Log**, the router's syslog will display on the TR069 management platform:

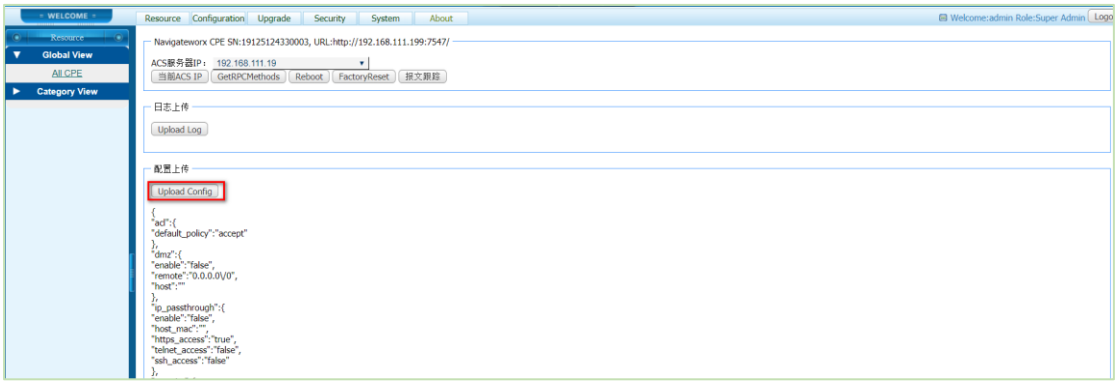




4.4 Config Upload

Login to the platform and go to **Resource>Test>Upload Config**, the router's config will display on the TR069 management platform:

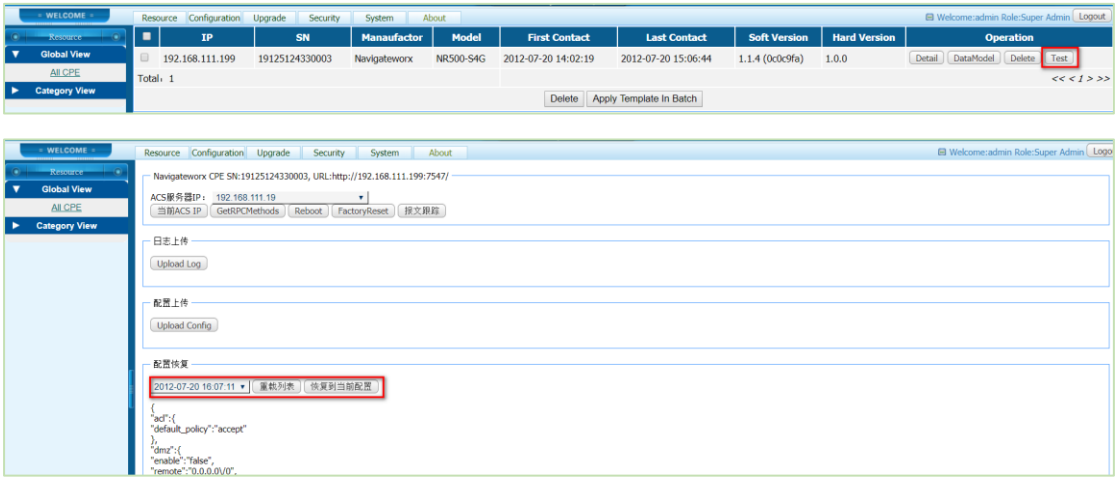




©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

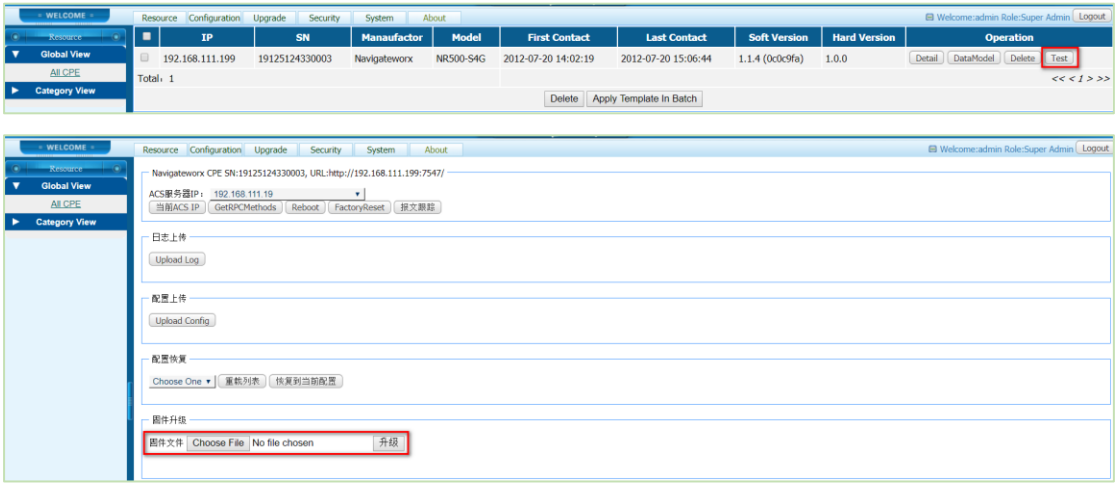
4.5 Config Update

From the TR069 management platform, we can do the config update to the router. Follow step4.4 we can upload a config to the platform, or we can put the config file to the "uploads" installation folder, then go to **Resource>Test>Config Reset**, to apply the config to the router:



4.6 Firmware/APP Upgrade

Login to the platform and go to **Resource>Test>Firmware Upgrade**, choose the firmware or APP file and upgrade to the router:

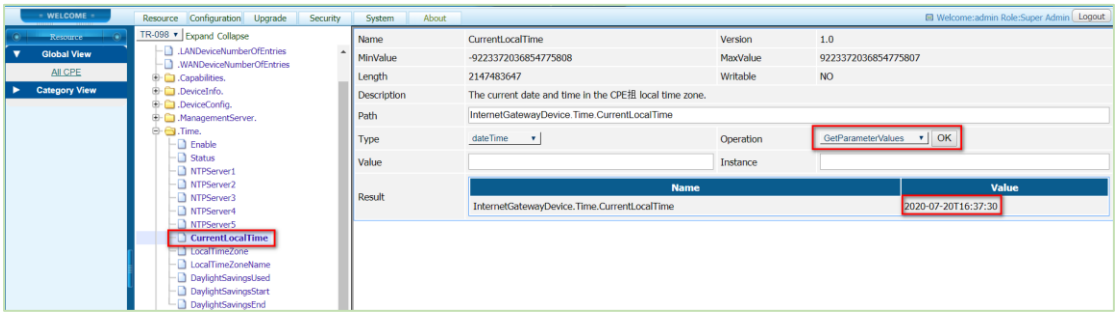


©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

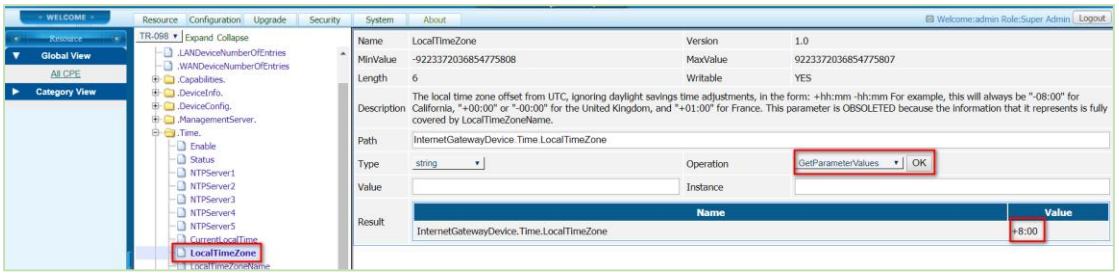
4.7 NTP Operation

Login to the platform and go to **Resource>DataModel>.Time**, we can configure NTP parameters and check the NTP status.

Check the local time:

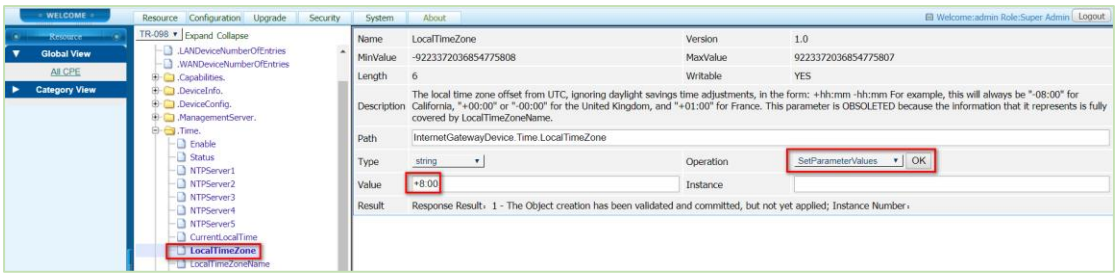


Check the timezone:



Specify the NTP server1 address:

Specify the timezone:

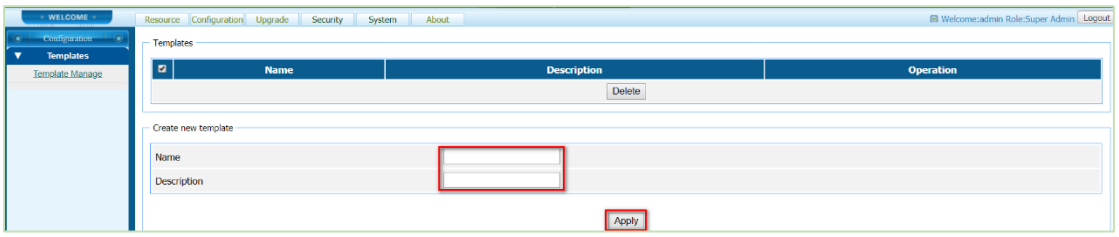


©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

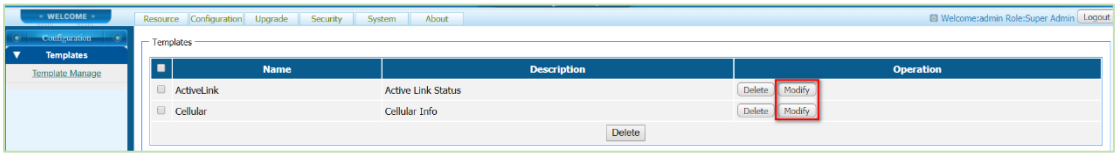
4.8 ActiveLink and Cellular Status

From the TR069 management platform we can check the active link and cellular status.

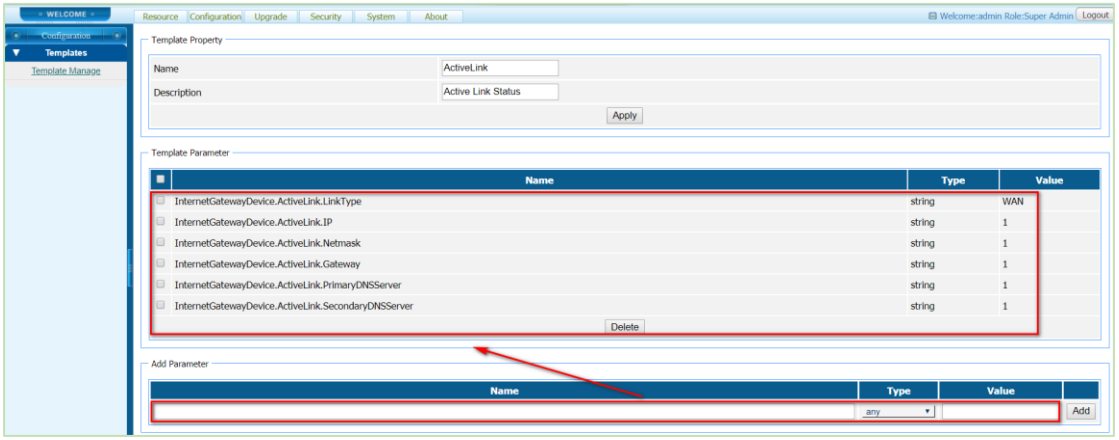
Login to the platform and go to **Configuration>Create new template**, to create the template for active link and cellular:



After that, add the template parameters for active link and cellular:



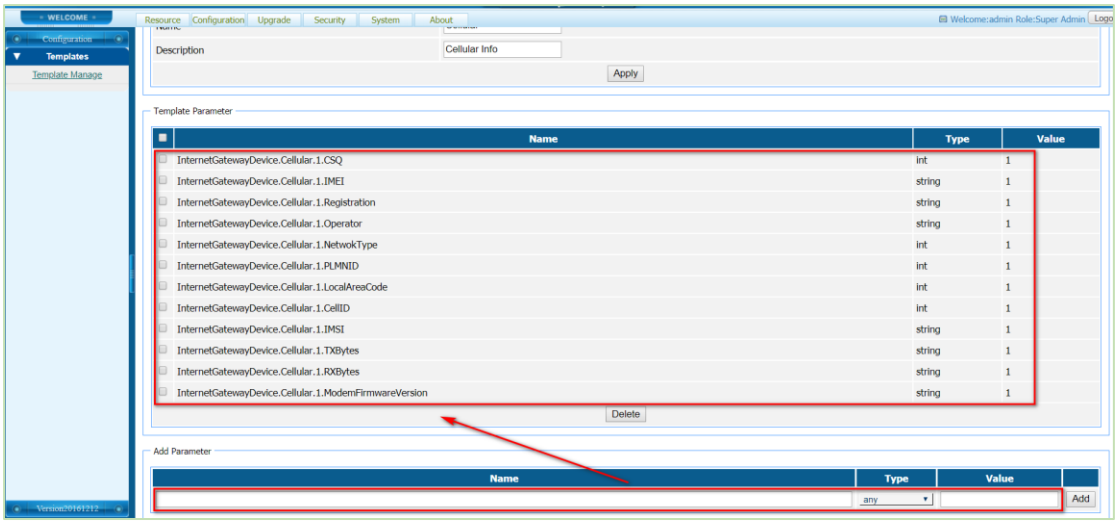
Template Parameters for ActiveLink:



Name	Type	Value
InternetGatewayDevice.ActiveLink.LinkType	string	WAN
InternetGatewayDevice.ActiveLink.IP	string	1
InternetGatewayDevice.ActiveLink.Netmask	string	1
InternetGatewayDevice.ActiveLink.Gateway	string	1
InternetGatewayDevice.ActiveLink.PrimaryDNSServer	string	1
InternetGatewayDevice.ActiveLink.SecondaryDNSServer	string	1

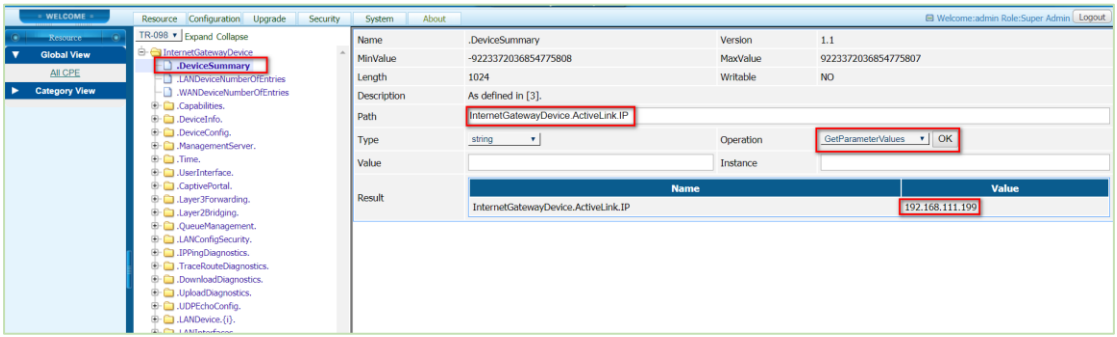
©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.

Template Parameters for Cellular:



Name	Type	Value
InternetGatewayDevice.Cellular.1.CSQ	int	1
InternetGatewayDevice.Cellular.1.IMEI	string	1
InternetGatewayDevice.Cellular.1.Registration	string	1
InternetGatewayDevice.Cellular.1.Operator	string	1
InternetGatewayDevice.Cellular.1.NetwokType	int	1
InternetGatewayDevice.Cellular.1.PLMNID	int	1
InternetGatewayDevice.Cellular.1.LocalAreaCode	int	1
InternetGatewayDevice.Cellular.1.CellID	int	1
InternetGatewayDevice.Cellular.1.IMSI	string	1
InternetGatewayDevice.Cellular.1.TXBytes	string	1
InternetGatewayDevice.Cellular.1.RXBytes	string	1
InternetGatewayDevice.Cellular.1.ModemFirmwareVersion	string	1

After creating the template, go to **Resource>DataModel,** click any one of the templates, and copy the Template Parameters to the "Path", Click "OK" then we can get the related value. Here get the "IP address" as an example:



©2018 Guangzhou Navigateworx Technologies Co., Ltd. All rights reserved.