RUT850 TR-069

The information in this page is updated in accordance with the **RUT850_R_00.01.04** firmware version.

Contents

Summary

TR-069 (**Technical Report 069**) is an application layer protocol designed for management of equipment connected to a remote network.

This chapter of the user manual provides an overview of the UPnP page in RUT850 devices.

TR-069 is additional software that can be installed from the **System → Package Manager** page.

TR-069 Client Configuration

Field	Value	Description
Enable	yes | no; default: **no**	Turns TR-069 client on or off.
Periodic enable	yes | no; default: **yes**	Turns periodic data transmissions to server on or off.
Accept server request	yes | no; default: **no**	When enabled the router accepts connection requests from server.
Sending interval	integer [60..9999999]; default: **100**	Periodic data transmission frequency (in seconds).
Username	string; default: **easycwmp**	Username used for authentication to a TR-069 server.
Password	string; default: **easycwmp**	Password used for authentication to a TR-069 server.

URL	host | ip; default: **http://192.168.1.110:8080/openacs/acs**	IP address or hostname of a TR-069 server.

Management via TR-069

TR-069 can be used to set or get values from RUT routers. Below is a list of commands used for router management via TR-069.

- R - read only;
- RW - read/write;
- string(64) - 64 bit string;
- string(256) - 256 bit string;
- unsignedInt - integer storing only positive values.

FW Upgrade:

1. **FileType** - firmware Upgrade Image, string(64)
2. **URL** - URL, specifying the source file location, string(256)
3. **Username** - username to be used by the CPE to authenticate with the file server. This string is set to the empty string if no authentication is required, string(256)
4. **Password** - password to be used by the CPE to authenticate with the file server. This string is set to the empty string if no authentication is required, string(256)
5. **FileSize** - the size of the file to be downloaded in bytes, unsignedInt

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Device Information:

1. **DeviceInfo.SpecVersion** - R
2. **DeviceInfo.ProvisioningCode** - RW
3. **DeviceInfo.Manufacturer** - device manufacturer (e.g., Teltonika) R
4. **DeviceInfo.ManufacturerOUI** - R
5. **DeviceInfo.ProductClass** - device model (e.g., RUT850) R
6. **DeviceInfo.SerialNumber** - device serial number (e.g., 1000111111) R
7. **DeviceInfo.HardwareVersion** - device hardware version (e.g., 0505) R
8. **DeviceInfo.SoftwareVersion** - device software version (e.g., {{{fw_version}}}) R
9. **DeviceInfo.UpTime** - router uptime R
10. **DeviceInfo.DeviceLog** - last line of device log. R
11. **DeviceInfo.MemoryStatus**
    11.1 **DeviceInfo.MemoryStatus.Total** - total device memory (e.g., 61008) R
    11.2 **DeviceInfo.MemoryStatus.Free** - free memory (e.g., 24224) R

IP Ping Diagnostics support:

1. **IPPingDiagnostics**

1.1 **IPPingDiagnostics.DiagnosticsState** - diagnostics State (e.g. None) R
1.2 **IPPingDiagnostics.Host** - host RW
1.3 **IPPingDiagnostics.NumberOfRepetitions** - number of repetitions RW
1.4 **IPPingDiagnostics.Timeout** - timeout RW
1.5 **IPPingDiagnostics.DataBlockSize** - data block size RW
1.6 **IPPingDiagnostics.SuccessCount** - success count R
1.7 **IPPingDiagnostics.FailureCount** - fail count R
1.8 **IPPingDiagnostics.AverageResponseTime** - average response time R
1.9 **IPPingDiagnostics.MinimumResponseTime** - minimum response time R
1.10 **IPPingDiagnostics.MaximumResponseTime** - maximum response time R

Mobile Information:

1.**MobileInfo**
1.1 **MobileInfo.RSSI** - GSM signal level R
1.2 **MobileInfo.ConnState** - connection state R
1.3 **MobileInfo.NetState** - network link state R
1.4 **MobileInfo.ICCID** - SIM ICCID R
1.5 **MobileInfo.IMSI** - IMSI R
1.6 **MobileInfo.RSCP** - RSCP level R
1.7 **MobileInfo.ECIO** - EC/IO level R
1.8 **MobileInfo.RSRP** - RSRP level R
1.9 **MobileInfo.SINR** - SINR level R
1.10 **MobileInfo.RSRQ** - RSRQ level R
1.11 **MobileInfo.CellID** - CellID R
1.12 **MobileInfo.Operator** - mame of operator used R
1.13 **MobileInfo.OperatorNum** - operator number R
1.14 **MobileInfo.ConnType** - data carrier type R
1.15 **MobileInfo.Modem**
1.15.1 **MobileInfo.Modem.Model** - modem model R
1.15.2 **MobileInfo.Modem.Manufacturer** - modem manufacturer R
1.15.3 **MobileInfo.Modem.Serial** - modem serial number R
1.15.4 **MobileInfo.Modem.Revision** - modem revision number R
1.15.5 **MobileInfo.Modem.IMEI** - modem IMEI R
1.15.6 **MobileInfo.Modem.SimState** - SIM card state R
1.15.7 **MobileInfo.Modem.PinState** - PIN state R
1.15.8 **MobileInfo.Modem.Temperature** - modem temperature in 0.1 degrees Celsius R
1.16 **MobileInfo.SentToday** - bytes sent today R
1.17 **MobileInfo.ReceivedToday** - bytes received today R
1.18 **MobileInfo.SentThisMonth** - bytes sent this month R
1.19 **MobileInfo.ReceivedThisMonth** - bytes received this month R

WAN Information:

1. **WANConnectionDevice**
1.1 **WANConnectionDevice.WANIPConnection**
1.1.1 **WANConnectionDevice.WANIPConnection.ConnectionStatus** - connection

status (e.g., Connected) R
    1.1.2 **WANIPConnection.ExternalIPAddress** - IP address R
    1.1.3 **WANIPConnection.MACAddress** - MAC address R
  1.2 **WANConnectionDevice.WANPPPConnection** - PPP connection
    1.2.1. **WANConnectionDevice.WANPPPConnection.1.Enable** - connection state (e.g., 1 or 0) R
    1.2.2. **WANConnectionDevice.WANPPPConnection.1.APN** - APN R
    1.2.3. **WANConnectionDevice.WANPPPConnection.1.ExternalIPAddress** - IP address R

WiFi Information:

1. **Radio**
  1.2 **Radio.Enable** - enabled (e.g., 0 or 1) RW
  1.3 **Radio.Status** - WiFi status (e.g., Up) R
  1.4 **Radio.Name** - Device name R
  1.5 **Radio.SupportedFrequencyBands** - supported frequency bandss (e.g., 2.4GHz) R
  1.6 **Radio.OperatingFrequencyBand** - operating frequency bandss (e.g., 2.4GHz) R
  1.7 **Radio.ChannelsInUse** - channels R
  1.8 **Radio.Channel** - channel in use RW
  1.9 **Radio.AutoChannelSupported** - auto channel support (e.g., 1) R
  1.10 **Radio.AutoChannelEnable** - auto channel state (e.g., 1) RW
  1.11 **Radio.OperatingStandards** - operating standards (e.g., 11ng) RW
2. **SSID**
  2.1 **SSID.Enable** - WiFi interface state (e.g., 1) RW
  2.2 **SSID.Status** - WiFi interface status (e.g., 1) R
  2.3 **SSID.Name** - interface name (e.g., wlan0) R
  2.4 **SSID.SSID** - SSID RW
3. **Security**
  3.5 **Security.ModesSupported** - (None,WEP-64,WEP-128,WPA-Personal,WPA2-Personal,WPA-WPA2-Personal,WPA-Enterprise,WPA2-Enterprise,WPA-WPA2-Enterprise) R
  3.6 **Security.ModeEnabled** - current mode (e.g WPA2-Personal) RW
  3.7 **Security.WEPKey** - WEP key RW
  3.8 **Security.PreSharedKey** - pre-shared key RW
  3.9 **Security.KeyPassphrase** - key passphrase RW

Hotspot information:

1. **General**
  1.1 **General.Enable** - state (e.g. 1) RW
  1.2 **General.IP** - IP address (e.g. 192.168.2.254) RW
  1.3 **General.Mode** - authentication mode
      (**extrad** - External radius, **intrad** - Internal radius, **norad** - Without radius, **add** - Advertisement, **mac** - MAC auth, **sms** - SMS OTP) (e.g., norad) RW
  1.4 **General.ExternalLandingPage** - enable external landing page (e.g., 1)

RW
   1.5 **General.LandingPageAddress** - external landing page address (e.g., www.landingpageaddr.com) RW
   1.6 **General.HTTPSRedirect** - enable HTTPS redirect RW
 2. **Radius**
   2.1 **Radius.Server1** - first radius server address RW
   2.2 **Radius.Server2** - second Radius server address RW
   2.3 **Radius.AuthenticationPort** - authentication port RW
   2.4 **Radius.AccountingPort** - accounting port RW
   2.5 **Radius.RadiusSecretKey** - radius secret key RW
   2.6 **Radius.UAMPort** - UAM port RW
   2.7 **Radius.UAMUIPort** - UAM UI port RW
   2.8 **Radius.UAMSecret** - UAM secret RW
   2.9 **Radius.NASIdentifier** - NAS identifier RW
   2.10 **Radius.SwapOctets** - swap octets RW
   2.11 **Radius.LocationName** - location name RW

Management server information:

 1. **ManagementServer.URL** - server url (e.g., http://192.168.1.110:8080/openacs/acs) RW
 2. **ManagementServer.Username** - username (e.g., easycwmp) RW
 3. **ManagementServer.Password** - password (e.g., easycwmp) RW
 4. **ManagementServer.PeriodicInformEnable** - enable periodic inform (e.g., 1 or 0) RW
 5. **ManagementServer.PeriodicInformInterval** - interval (e.g, 100) RW
 6. **ManagementServer.PeriodicInformTime** - inform time (e.g, 0001-01-01T00:00:00Z) RW