

Integrated Environment for the description, implementation and testing of TR-69 clients

**iEdit69** is an integrated software environment enabling the rapid development and instantiation of TR-069 clients for any class of Customer Premises Equipment (CPE) devices, including Gateways, Set-Top Boxes, VoIP phones and NAS devices. Generating platform independent C code for the TR-069 client, iEdit69 makes implementation and integration easy for any hardware platform. iEdit69 is especially designed for CPE manufacturers with large production lines addressing the problems of mass implementation, testing and life-cycle management of the different TR-069 client applications. For service providers, iEdit69 constitutes the basis for a comprehensive and integrated management tool.

**We made coding easy** iEdit69 offers you an integrated environment in an easy-to-use format and is fully compatible with the TR-106 (Data Model Template for TR-069-enabled Devices) DSL forum's standard. The Device Descriptor provides a user friendly environment for describing every kind of CPE device. Then the Device Creator, acting as the heart of iEdit69, undertakes the automatic generation of the source code for the corresponding TR-069 client application.

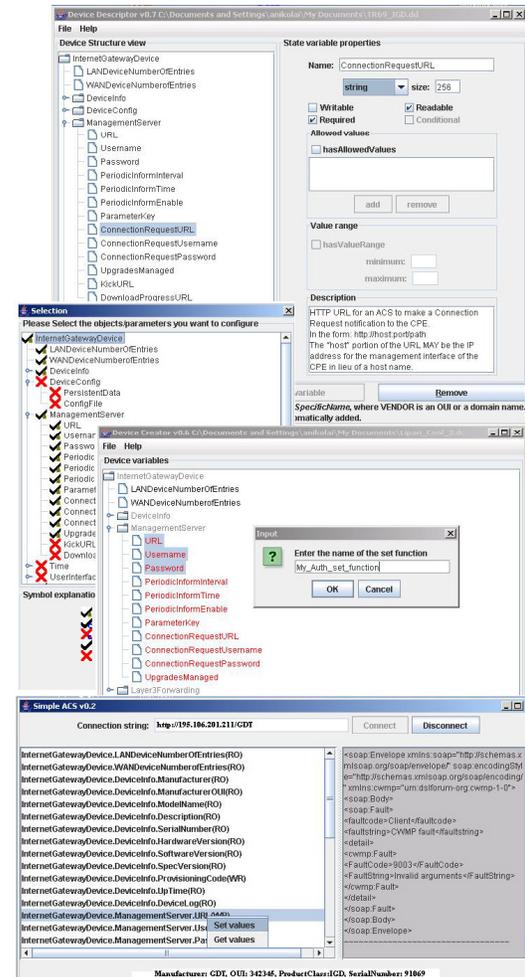
**The Device Descriptor** With iEdit69's Device Descriptor, you are able to create the data model of a CPE easily by adding Objects and State variables. For each object/parameter the following information can be inserted:

- Type / Size,
- Read / Write property,
- Required/Conditional/Optional properties,
- Allowed values,
- Value Range
- Description

Adding vendor specific objects/parameters is supported and the corresponding instructions are provided in a user-friendly environment.

**The Device Creator** is the heart of iEdit69. It generates C code for the TR-069 client application that is built for a specific CPE. The Device Creator presents the full TR-069 model of a CPE, taking as input a description file generated by the Device Descriptor. A form prompts you to select the optional objects/parameters that will be supported by the target CPE. You are consistently informed about the conditional object/parameters that have become 'required' due to the selection of 'optional' parents. Device profiles, as defined in TR-106, are also supported.

After the insertion of the specific CPE's data model, the Device Creator lists all the objects and parameters to be supported by the TR-069 client application. Then you can randomly define and map implementation-specific functions (My\_Get/My\_Set) to the user-defined sets of objects/parameters. For example, all the parameters belonging to the InternetGateway.Device.DeviceInfo object, which contains general device information could be handled by the user defined My\_DeviceInfo\_Get-function. TR-069 compliance is automatically provided and you are guided to complete implementation specific parts relevant only for your own CPE platform.



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These parts are related to the code that retrieves or sets the parameter values from within the system. To ensure TR-069 conformance, the Device Creator does not allow code creation before Set/Get function pairs have been assigned for all the objects/parameters.

**Verification made simple** Being fully compatible with the PD-128 and WT-123, the Simple ACS (SACS) of iEdit69 is a verification tool for the code created by the Device Creator. After building the TR-069 client for the target CPE, you can use SACS to be connected to the TR-069 client, to get all supported parameters and to Set/Get the values of the corresponding state variables. Monitoring of HTTP and SOAP messages is supported for debugging purposes. Additionally, SACS decodes and analyzes error responses, as generated by the TR-069 client. The SACS supports both CPE and ACS initiated connection establishment in order to test the client in both modes.

**We integrated all the standards you need** iEdit69 is designed taking into consideration the whole suite of TR-069 related standards. Thus, it supports the following Technical Reports: TR-069, TR-098, TR-104, TR-106 and TR-111. Since the standardization is still ongoing, iEdit69 is continuously upgraded to support the corresponding Working Texts WT-123, WT-140, WT-142 and WT-143. Finally, to achieve success in TR-069 plugfests of DSL forum, iEdit69 adheres to the PD-128 procedures.

**Made for you** iEdit69 is your choice if you are:

- **a CPE vendor and/or an OEM** seeking to incorporate TR-069 compliance to your range of devices with minimum investment. For in-house developers, iEdit69 enables the implementation and testing of TR-069 client application for any CPE product without further expertise or costs. Pay-off starts from the first implementation. For outsourced TR-069 development, iEdit69 enables you to cut down the costs of TR-069 client maintenance.
- **a developer of advanced TR-069 compliant families of devices.** For a developer, iEdit69 provides reliable and coherent implementation, continuously supporting version control in an easy-to-maintain and -retrieve format. The produced code is effortlessly mapped back to the protocol and to your selection of parameter grouping for each individual implementation of Set/Get functions.
- **an ACS vendor** interested in familiarizing your clients with the TR-069 protocol. The modular design of the ACS part (SACS) of the iEdit69 eases the set-up of configuration scenarios of TR-069 capabilities.
- **a service provider.** For services providers, iEdit69 is the basis for a comprehensive remote TR-069 client configuration tool.

### About GDT

GDT is a system design house focused on embedded networked systems. Our portfolio encompasses design services and complete high technology products ranging from deeply embedded communications subsystems to complete remote management solutions. The value added for our customers comes from our unique offerings combining strict quality standards and technical excellence.

We at GDT are proud to be delivering high-value, advanced ICT technology

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