

# Treck Universal Plug and Play

product information

*Treck Universal Plug and Play is a technology which enables you to implement network devices that can be controlled by Microsoft Windows clients.*

*Examples of Universal Plug and Play enabled network devices include NAT firewalls, networked printers, A/V media servers and media renderers, networkenabled security cameras.*

## **Treck Universal Plug and Play Includes:**

- Treck web server serves up your network device's Universal Plug and Play device description and service description XML documents to interested Universal Plug and Play control points
- Treck SSDP advertises your network device's services to Universal Plug and Play control points
- Treck GENA notifies subscribed Universal Plug and Play control points of changes in your network device's state (for example, networked printer is out of paper)
- Treck SOAP is a RPC (Remote Procedure Call) mechanism used by control points to control your network device, and to query status from your network device
- Treck device code generator (upnpcgen) processes your Universal Plug and Play device description and service description XML documents, generating code that implements the skeleton of your Universal Plug and Play network device, including stub functions for SOAP actions and state variable accessors (GENA) that you implement. upnpcgen also does full XML schema validation of these documents, to

ensure that your network device is interoperable with Universal Plug and Play control points.

- Code examples showing how to use Treck Universal Plug and Play, including Internet Gateway Device DCP with NAT Traversal and A/V Media Server and Media Renderer DCPs

## **Additional features:**

- Supports setting UDN (Unique Device Name) of Universal Plug and Play device instance at run-time
- Supports Universal Plug and Play over IPv4, Universal Plug and Play over IPv6, and Universal Plug and Play over dual stack (IPv4+IPv6)
- Supports user application sending custom SOAP error codes and error description text in response to SOAP action request
- GENA can be excluded at compiletime, for reduced code size
- Universal Plug and Play device description and service description is set at compile-time by upnpcgen, not at run-time, resulting in a very simple (but powerful) Treck Universal Plug and Play run-time API
- Uses Treck web server to serve up the device presentation page
- Supports pre-defined SOAP action "QueryStateVariable", which can be useful for interoperability testing

*For more information, please visit [www.treck.com](http://www.treck.com)*



Mobile



Network

**Treck Inc.**