



TN0012 – SkyRouter DDNS Service

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Purpose:

This TechNote describes changes to the Dynamic Domain Name Service (DDNS) feature of all SkyRouter models effective as of the date of publication.

Background:

All SkyRouter products support two primary forms of DDNS management described as Standard UDP and EW/UDP on the Wireless Interface management screen, the relevant portion of which is shown in figure 1.

A screenshot of a web-based configuration interface for a SkyRouter. The title is "Client For Dynamic IP Address Resolution" in red. Below the title, there are four radio buttons for "Select DDNS Type": "None", "EW/SMS", "EW/UDP" (which is selected), and "Standard UDP". Below this, there is a text input field for "Device Name" containing "ctek01.thingme.net". Below that, there are two text input fields for "Primary Name Server" (containing "68.15.90.14") and "Secondary Name Server" (containing "70.91.104.81"). At the bottom of the form are two buttons: "Update" and "Home".

Figure 1

The Standard DDNS feature is used to update conventional DDNS servers usually BIND or Microsoft DNS servers using the update protocol defined in IETF RFC 2136. This feature is unchanged by TechNote.S4X00-012 since BIND and Windows network DDNS servers expect updates to occur using UDP over IP port 53. The Standard DDNS feature on SkyRouters continues to use IP port 53.

EW/UDP is a Ctek proprietary DDNS service that is validated and indexed by the wireless unit's Mobile Directory Number (MDN). In the past EW/UDP updates have also used IP port 53. However, recent actions by some network operators has resulted in port 53 traffic being blocked on the reverse link meaning that DDNS updates were blocked. Therefore Ctek has shifted EW/UDP update traffic to a different default port assignment. Starting with the release levels described in the body of this document EW/UDP update traffic has a default assignment of IP port 5432 and a mechanism for modifying the assignment as required.



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Implementation:

Effective with the release levels shown in Table 1 below SkyRouter products make use of the configuration file `/etc/conf.d/ewudp_conf` to establish the DDNS update port assignment. If your SkyRouter is at an older release level you will need to obtain the latest firmware update from Ctek to use the port assignment configuration file.

If as in the case of the 4200E changes to the port assignment are required this file may be transferred to an attached computer using FTP, edited with any standard text editor, e.g. Wordpad, and transferred back to the SkyRouter, again using FTP.

Model	Release	DDNS Port	Notes
4100S (Old Style)	2.02.05	5432	See TechNote S4100-08 to determine style
4100S (New Style)	3.01.05	5432	See TechNote S4100-08 to determine style
4100E (Old Sytle)	1.03.05	5432	See TechNote S4100-011 to determine style
4100E (New Style)	1.04.00	5432	See TechNote S4100-011 to determine style
4200E	1.01.00	<u>53</u>	This release uses the configuration file but is still preset to port 53. Subsequent releases will modify the default to be consistent with all other SkyRouter products. In the interim manual updating as described above is required.
4300S	TBD	5432	
4310S	TBD	5432	

Table 1