Vaunix Technology Corporation
Lab Brick® LSW RF Switches
Windows x64 SDK Release Notes

Overview

The Lab Brick LSW RF Switch ("LSW") x64 SDK supports developers who want to control
LSW devices from Windows programs on 64 bit Intel or AMD platforms, or who want to control
the synthesizers from LabVIEW[1] or other National Instruments programming environments
running on 64 bit versions of Microsoft Windows[2]. The SDK includes an x64 dll which provides
an API to find, initialize, and control the switches, along with header files and an example x64 C
program which demonstrates the use of the API. The API is unchanged from the Win32 version
of the LSW API except for the addition of a couple of functions described below. The x64
version of the LSW DLL uses Microsoft's standard x64 dll linkage, which includes standard
Microsoft style function name decoration.

Changes in the SDK

The x64 SDK includes vnx_switch64.dll, the 64bit dll, vnx_switch64.lib, the library for linking,
and vnx_lsw_api.h, an include file with the function declarations for the dll.

New x64 API functions in the SDK

The Win32 dll function fnLSW_GetModelName which returned a C style ASCII string
ModelName has been replaced with two functions, one which returns a C style ASCII string, the
other which returns a Unicode (wchar_t) string. The function names end in A or W to indicate
their string output type:

VNX_SWITCH_API int fnLSW_GetModelNameA(DEVID deviceID, char *ModelName)

    This new function is used to get the model name of the switch as an ASCII string. If the
function is called with a null pointer, it returns just the length of the model name string. If the
function is called with a non-null string pointer it copies the model name into the string and
returns the length of the string. The string length will never be greater than the constant
MAX_MODELNAME which is defined in vnx_lsw_api.h This function can be used
regardless of whether or not the switch has been initialized with the fnLSW_InitDevice
function.

VNX_SWITCH_API int fnLSW_GetModelNameW(DEVID deviceID, wchar_t *ModelName)

    This new function is used to get the model name of the switch as a Unicode string. If the
function is called with a null pointer, it returns just the length of the model name string. If the
function is called with a non-null string pointer it copies the model name into the string and
returns the length of the string. The string length will never be greater than the constant

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[1] LabView is a trademark of National Instruments
[2] Windows is a trademark of Microsoft Corporation

MAX_MODELNAME which is defined in vnx_lsw_api.h This function can be used regardless of whether or not the switch has been initialized with the fnLSW_InitDevice function.

VNX_SWITCH_API int fnLSW_GetDLLVersion()

This function returns the version of the dll. It is also present in updated versions of the Win32 SDK.