



## Transfer Ready Application Note

The SANBlaze Virtualun product provides the capability to emulate many boundary conditions and test cases that, prior to this product, were difficult to do.

Existing SANBlaze users asked for the ability to generate non-standard or random XFER\_RDY (transfer ready) ranges that our target emulator would put on the Fibre Channel bus. As of revision 2.1 of the VirtualLUN software, each LUN's XFER\_RDY range is programmable. This document provides some examples and tips on how to use the programmable XFER\_RDY feature.

**How it works:** XFER\_RDY defaults to 1MM or 1048576. The value can be forced to a fixed size, a range of sizes, or a non standard value. These options are configurable both via the GUI/Web interface, as well as via the Command Line Interface (CLI)

Using the Command Line Interface:

```
# echo xfer_rdy_size=1024,1048576 > /port0/alias0lun0
```

This will tell the emulation software to generate random transfer ready values between 1024 and 1048576 aligned by 512 block bytes. ( For Port 0, Target 0, LUN 0)

To test if application software will work with non-standard transfer readies

```
# echo xfer_rdy_size=1536,1536 > /port0/alias0lun0
```

This will generate 3 disk block transfer readies for each SCSI write.

```
# echo xfer_rdy_size=2561,2561 > /port0/alias0lun0
```

This will generate 2k plus 1 block of transfer readies foe each SCSI write command.

To change the values via the web interface, the configuration is found on the LUN Configuration page

The screenshot shows the SANBlaze VirtualLUN web interface in Microsoft Internet Explorer. The browser address bar shows `http://69.26.107.203/home.asp`. The page title is "SANBlaze VirtualLUN Home Page - Microsoft Internet Explorer".

The main content area is titled "LUN 0 Configuration" and includes sub-tabs for "LUN 0 Error Conditions" and "LUN 0 Initiator Mapping". A left-hand navigation tree shows the following structure:

- SANBlaze VirtualLUN
  - 69.26.107.203
    - QuickSetup
    - Port[0]
      - Target[0]
        - LUN(0)** (highlighted with a red arrow)
        - LUN(1)
      - Target[1]
    - Port[1]
    - Configuration
    - Web User Guide
    - CLI User Guide
    - User Management
    - Scripting
    - Poweroff/Reset

The main configuration table for LUN 0 is as follows:

Parameter	Current Value	This LUN Only	Apply to Scope	
A_Port	Port: 0 Target: 0 LUN: 0			
Map B_Port	Map to Port: 1		Map Target: 0	
Owner:	system	<input checked="" type="radio"/>	<input type="radio"/>	
ReadSize:	16 (Max 3460 MB, Min 4 MB)	<input checked="" type="radio"/>	<input type="radio"/>	
WriteSize:	Locked to ReadSize	Unlock <input type="checkbox"/>		
RdLatency:	min: 0 msec max: 0 msec	<input checked="" type="radio"/>	<input type="radio"/>	
WrLatency:	min: 0 msec max: 0 msec	<input checked="" type="radio"/>	<input type="radio"/>	
XFER_RDY:	min: 1048576 bytes max: 1048576 bytes	<input checked="" type="radio"/>	<input type="radio"/>	
EncServ:	<input type="checkbox"/> Current State	<input checked="" type="radio"/>	<input type="radio"/>	
Enabled:	<input checked="" type="checkbox"/> Current State	<input checked="" type="radio"/>	<input type="radio"/>	
Write Enabled:	<input checked="" type="checkbox"/> Current State	<input checked="" type="radio"/>	<input type="radio"/>	
Ready:	<input checked="" type="checkbox"/> Current State	<input checked="" type="radio"/>	<input type="radio"/>	
LUN Memory:	<input type="checkbox"/> In Use <input checked="" type="checkbox"/> Release <input type="button" value="SaveToFile"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Restore Data	None <input type="button" value="Data"/> <input type="button" value="Pattern"/> <input type="button" value="Delete"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Scope of Changes		LUN	Target	Port
Active & Inactive LUNs	<input checked="" type="radio"/>	LUNs with ID 0 <input checked="" type="radio"/>	Targets with ID 0 <input checked="" type="radio"/>	Ports with ID 0 <input checked="" type="radio"/>
Active LUNs	<input type="radio"/>	All LUNs <input type="radio"/>	All Targets <input type="radio"/>	All Ports <input type="radio"/>