IBM System Storage SAN Volume Controller

Planning, Hardware Installation and Service Guide Errata for Redundant AC Power

Version 4.2.0
July 13, 2007

GA32-0551-1, GC27-2132-00 and GC26-7901-01 Errata.

Contents

Preface

This guide provides errata information that pertains to the redundant ac power feature information in release 4.2.0 of the *IBM System Storage SAN Volume Controller Planning Guide, Hardware Installation Guide and Service Guide.*

Who should use this guide

This guide should be used by anyone planning, installing or servicing an IBM System Storage SAN Volume Controller. Before using the IBM System Storage SAN Volume Controller redundant ac power feature, you should review the errata contained within this guide and note the details with respect to the copy of the *Planning Guide, Hardware Installation Guide and Service Guide* supplied with your SAN Volume Controller.

Last Update

This document was last updated: July 13, 2007

Change History

The following revisions have been made to this document:

Revision Date	Sections Modified
July 13, 2007	First edition

Table 1: Change History

Chapter 1. Redundant ac power

The IBM System Storage SAN Volume Controller Planning Guide, Hardware Installation Guide and Service Guide describe the planning, installation and servicing of the IBM System Storage SAN Volume Controller redundant ac power feature. However, since the publication of these guides, a change was made to the cables supplied with the redundant ac power feature. This chapter describes the implication of the cable change and includes an example mains wiring diagram that was not included in the guides.

Overview of Changes

The changes from the published guides are:

- The redundant ac power feature is shipped with two IEC320-C19 to C14 cables rather than two IEC320-C19 to C20 cables.
- The rack's power distribution units (PDUs) must have IEC320-C13 rather than IEC320-C19 outlets.
- The redundant ac power switch's input circuits do not need to be protected with dedicated circuit breakers. (Although normal electrical circuit planning must take place to ensure a safe environment.)

Specific changes

The specific changes are underlined.

Planning Guide page 21, Hardware Installation Guide page 33 and Service Guide page 65. Change the following paragraph:

The redundant ac power switch requires two independent power sources, provided through two, rack mounted power distribution units (PDUs). The PDUs must have IEC320-C19 outlets.

to:

The redundant ac power switch requires two independent power sources, provided through two, rack mounted power distribution units (PDUs). The PDUs must have IEC320-C13 outlets.

Planning Guide page 18 and Hardware Installation Guide page 41. Change the following paragraph:

The 2145 UPS-1U is supplied with an IEC 320-C13 to C14 jumper to connect it to a rack PDU. You can also use this cable to connect the 2145 UPS-1U to the redundant ac power switch. The redundant ac power switch is supplied with two IEC 320-C19 to C20 power cables to connect to rack PDUs. There are no country specific cables for the redundant ac power switch.

to:

The 2145 UPS-1U is supplied with an IEC 320-C13 to C14 jumper to connect it to a rack PDU. You can also use this cable to connect the 2145 UPS-1U to the redundant ac power switch. The redundant ac power switch is supplied with two IEC 320-C19 to C14 power cables to connect to rack PDUs. There are no country specific cables for the redundant ac power switch.

Planning Guide page 16. Delete the following paragraphs and table:

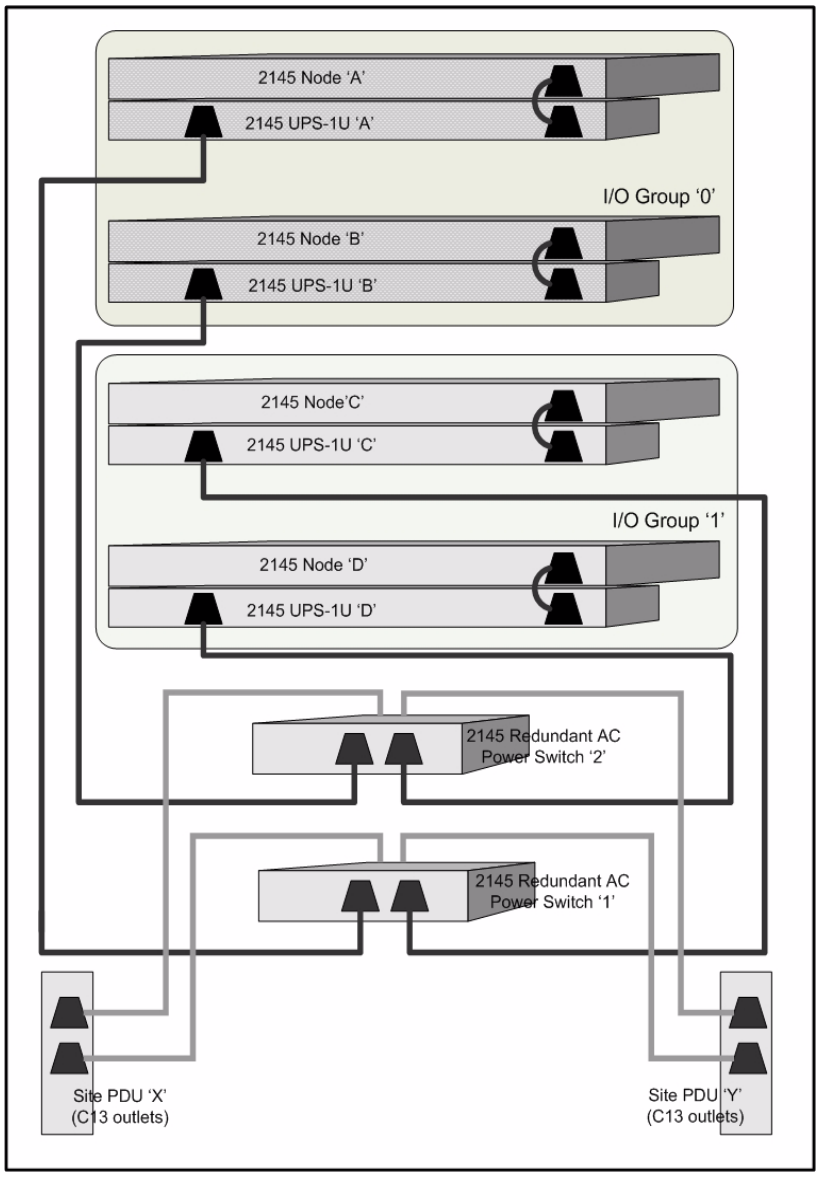
If a redundant ac power switch is used, both input circuits to the redundant ac power switch are protected with a circuit breaker.

The circuit breaker rating requirements are shown in the following table:

Number of 2145 UPS-1Us connected to the redundant ac power switch	Circuit breaker minimum rating	Circuit breaker minimum rating
1	5 A	16 A
2	7 A	16 A

Example mains wiring diagram

The following diagram illustrates how redundant ac power switches might be cabled.



Four node SAN Volume Controller, with redundant ac power feature, mains wiring

The diagram shows the mains power connections in an example installation. This example shows a four node cluster, there are two I/O groups; I/O group '0' contains nodes 'A' and 'B', I/O group '1' contains nodes 'C' and 'D'. In this example only two redundant ac power switches are used; each powers one node in each I/O group. [For maximum redundancy, four redundant ac power switches would be used, each powering a single node.]

Note that the diagram is included to show an example of the cable connections; it does not show a suggested physical location for the components.