Raritan. Blade Server Configuration Guide

Dominion KX II Blade Server Configuration Guide - Release 2.1.10, v1.0

Version: Dominion KX Release 2.1.10

Date: July 9, 2009

Applicable Dominion KX II models:

DKX2-108, DKX2-116, DKX2-132

DKX2-216, DKX2-232

DKX2-416, DKX2-432, DKX2-464

DKX2-832, DKX2-864

Overview:

This guide contains instructions on the configuration of IBM and Dell blade server chassis KVM and management modules to enable integration with the Dominion KX II blade server feature introduced in Release 2.1. The guide provides supplemental information to the Dominion KX II Users Guide featuring screen shots and detailed instructions.

Contents:

The guide contains instructions and screenshots for configuration of the following blade server types:

- IBM BladeCenter E or H with Advanced Management Module)
- Dell 1855/1955 with Analog KVM Module
- Dell M1000e with iKVM Module

Related Documents:

Dominion KX II User Guide (Release 2.1.10)

Dominion KX II CIM Guide (Release 2.1.10)

Dominion KX II Release Notes (Release 2.1.10)

Caution:

This guide has been prepared based on specific versions of the IBM and Dell blade servers, which may differ from the version you may have. Consult the manufacturer documentation for your particular version for more information.



IBM Advanced Management Module Setup

This section describes the configuration required for the IBM BladeCenter Advanced Management Module to integrate with Raritan's Dominion KX II.

For the IBM BladeCenter, the Advanced Management Module (AMM) is supported. The older Management Module has not been certified in this release. The KX II only supports autodiscovery for AMM[1] as the acting primary management module.

The following IBM BladeCenter minimum AMM firmware is recommended:

Management Module Firmware Main application: BPET36K

Released: 04-22-08

Name: CNETMNUS.PKT

Rev: 54

Under MM Control, access the Login Profiles to verify or create a user account for access from the Dominion KX II.

Management Module Login Configuration



Use the following links to jump down to different sections on this page.

Login Profiles

Account Security Management

Login Profiles

To configure a login profile, click a link in the "Login ID" column.

	Login ID	Role	Active Sessions	Last Login	Password Compliant	Days Until Password Expires	Dormant	State	Action
1	USERID	С	D	Never	Yes	n/a		Active	Disable
2	kperveil	S	0	09/24/07 15:12:57	Yes	n/a		Active	
3	andy	S	0	09/18/07 09:28:43	Yes	n/a		Active	
4	toms	0	1	09/25/07 09:14:11	Yes	n/a		Active	Disable
5	jimrix	0	0	04/10/07 22:22:40	Yes	n/a		Active	Disable
6	dale	0	0	Never	Yes	n/a		Active	Disable
7	stephen	0	0	Never	Yes	n/a		Active	Disable
8	dallas	0	0	Never	Yes	n/a		Active	Disable
9	hfuser	0	0	Never	Yes	n/a		Active	Disable
10	angela	0	0	Never	Yes	n/a		Active	Disable
11	phyllis	С	0	04/26/07 01:24:31	Yes	n/a		Active	Disable
12	~ not used ~								

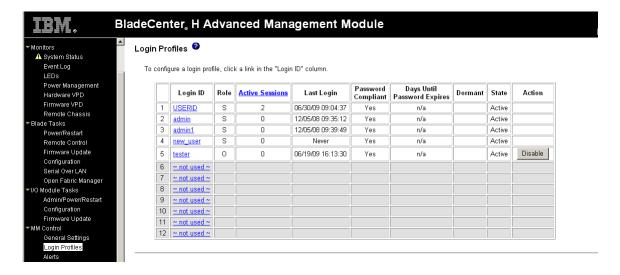


Certain operations performed via the SSH connection require "Supervisor" (administrator level) privileges (e.g. setting idle timeout), so the account has to be created accordingly.

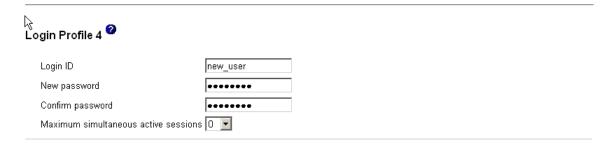
Here are some typical errors if Supervisor level control is not provided:

Communication Error	Error communicating with 'IBM-H-CHASSIS' connected to port '12' failed to 'failed to set Media Tray', <-7014:User does not have the authority to issue this command.>.
Communication Error	Error communicating with 'IBM-H-CHASSIS' connected to port '12' failed to 'connect to target', <-7014:User does not have the authority to issue this command.>.

For example, "new_user" has been assigned a "Supervisor" role.



The login ID can be created by selecting a login id that is currently "not used", and can subsequently be edited by selecting it.

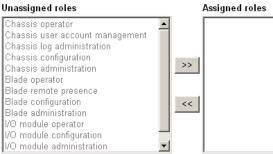




Role

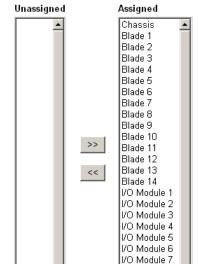
- Supervisor (requires Scope selection)
- O Operator (readonly, all scopes)
- C Custom (requires Roles and Scopes)

Unassigned roles





Access Scope



I/O Module 8 I/O Module 9 I/O Module 10 🗹



Under **Network Protocols**, ensure that **SSH Server** is Enabled. SSH will be used to access the command line interface to control blade chassis operations



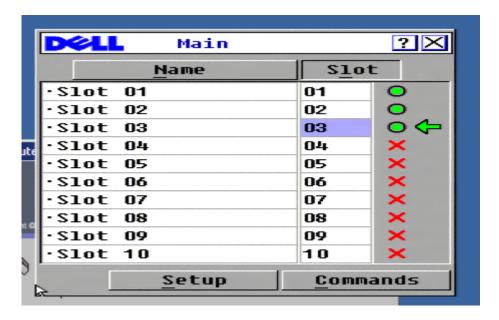
The Administrative Management Module firmware version can be verified by accessing **Service Tools** > **AMM Service Data**.

```
Firmware Update
MM Control
                                 Management Module 1:
                                          FRU Number: 3949661
                                          UUID: A788 9398 AC67 11DC 8BAD 0014 5EE0 6B5C Manufacture ID: IBM ( ASUS )
     General Settings
     Login Profiles
                                          Machine Type/Model: n/a
     Alerts
                                          Machine Serial Number: n/a
                                          HW Rev: 4
     Serial Port
                                          Manufacture Date: 51/07
     Port Assignments
                                          Part Number: 39Y9659
FRU Serial Number: YK16807CH2GS
    Network Interfaces
    Network Protocols
                                          Manuf ID: 20301
     Chassis Int Network
                                          Product ID: 65
     Security
                                          CLEI: -
                                          Name: IBM-H-CHASSIS
     File Management
                                          Firmware
     Firmware Update
                                                    Main application: BPET42I
     Configuration Mgmt
                                                              Released: 07-11-08
     Restart MM
                                                              Name: CNETMNUS.PKT
 Service Tools
                                                              Rev: 66
                                                    Boot ROM: BPBR103
     AMM Service Data
                                                              Released: 06-03-08
Name: CNETBRUS.PKT
     AMM Status
                                                              Rev: 1
Log Off
                                                    CPLD: n/a
                                                              Rev: 35
```



Dell 1855/1955 Analog KVM Module

- From the Standard KVM Port invoke the **Main** menu using the current hot-key sequence. This may be set up to use any or all of the following:
 - Scroll Lock + Left Alt + Scroll Lock + Slot Number
 - Scroll Lock + Shift + Scroll Lock + Slot Number
 - PrintScr + Slot Number
 - Ctrl + Ctrl + Slot Number



Select the **Setup** button to see this screen:

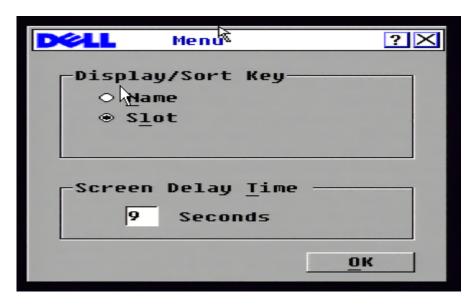




Select Menu and then Display/Sort Key by Slot.

Set a **Screen Delay Time** - the time delay before the OSCAR menu is displayed after it is invoked. Recommend a value of 8 seconds.

If the hot-key sequence can be sent and executed within this timeframe, the OSCAR menu won't be seen when switching.



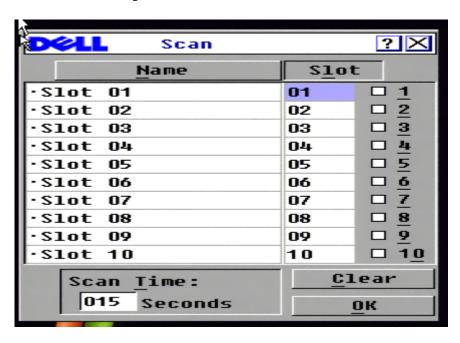
From the **Setup** menu, click on **Flag** to configure the Flag's behavior.

The flag serves as a visual confirmation of the slot you have connected to. Recommend to select **Displayed** and **Timed** so the flag is shown when first connected. This disappears after the **Screen Delay Time** specified earlier.

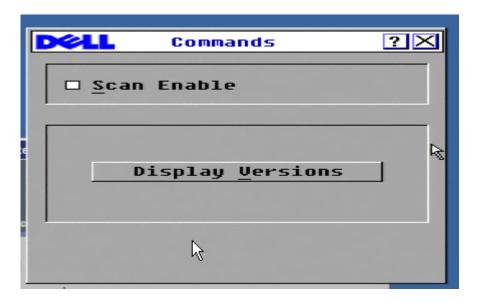




Return to the **Setup** menu, click on **Scan** to ensure that no slots are to be scanned.



From the **Main** screen, select **Commands** and make sure **Scan Enable** is NOT enabled.





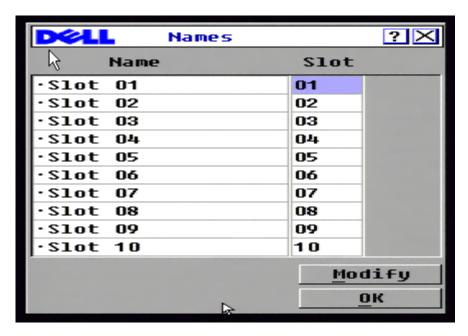
Return to the **Setup** screen and select **Security**. The **Enable Screen Saver** must be disabled and no password provided.



If you forget to disable the screensaver and password you'll encounter the following:



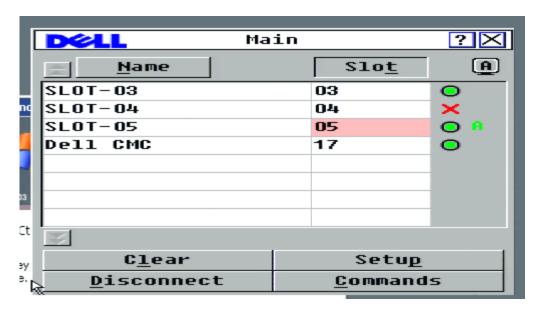
From the **Setup** screen, **Names** can be edited but these are not used with the KX II.





Dell M1000e with iKVM Module

From the standard KVM Port, invoke the **Main** screen using the configured hot-key sequence. This may be set up to use: PrintScreen, Alt-Alt, Ctrl-Ctrl, and/or Shift-Shift.



Select **Setup** to see the following screen:



Select the Menu button.



Select Display/Sort Key by Slot

Designate 1 of 4 possible hot-key sequences to invoke OSCAR (the Port Configuration Page must match the hot-key selection made here).

Set a **Screen Delay Time** - the time delay before the OSCAR menu is displayed after it is invoked. Recommend a value of 8 seconds.

If the hot-key sequence can be sent and executed within this time, the OSCAR menu won't be seen when switching.



Return to the **Setup** screen and click **Security**. The **Enable Screen Saver** must be disabled and no password provided.





If you forget to disable the screensaver and password you'll encounter the following:



Return to the **Setup** screen and select Flag. The flag serves as a visual confirmation of the slot you have been connected to. Check **Displayed** and **Timed** so the flag is shown when first connected and disappears after the delay interval (the 8 seconds specified earlier).

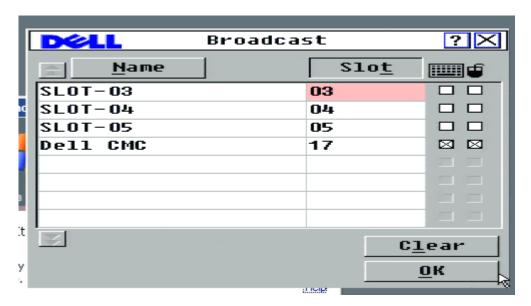


Return to the **Setup** screen and select **Language**, select **English**.

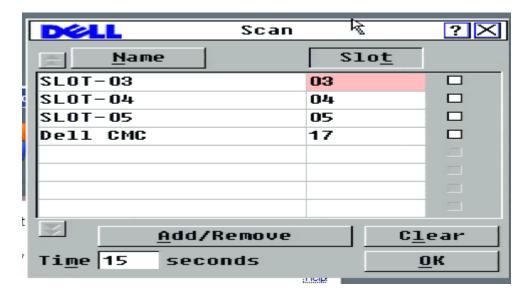




Return to the **Setup** screen and select **Broadcast**, ensure no slots are designated for broadcast.

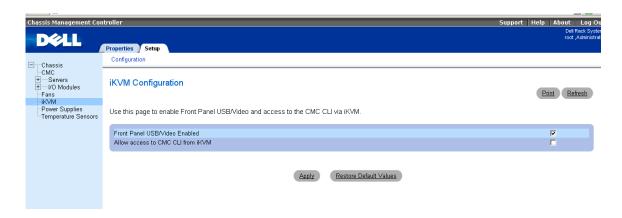


Return to the **Setup** screen and select **Scan**, ensure that no slots are designated for scan.



Setup for iKVM Module from the Chassis management Controller's (CMC) Administrative GUI, need to:

- Ensure that **Front Panel USB Video** is NOT enabled. The Front Panel has priority over the connections at the rear, so any connections at the front will prevent proper operation.
- Ensure that Allow access to CMC CLI from iKVM is NOT enabled



If the Front Panel USB/Video is enabled, you'll see a message indicating contention between the Front Panel and Rear Panel Access:



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