

# Features and Benefits

Raritan's CommandCenter Secure Gateway (CC-SG) provides IT administrators and lab managers with consolidated, secure and simplified remote access and control of multiple technology platforms at the application, operating system and BIOS level.

#### Feature Summary

- Secure, single sign-on to a single IP address for managing all of Raritan's Dominion® KVM-over-IP switches, serial console servers, Paragon® II analog KVM switches and remote power control via Raritan PX™ and Servertech CDU1 and PRO2 intelligent PDUs
- Single point of access to physical servers (including blade systems, PCs and servers), virtual machines and VMware® infrastructure such as the ESX/ESXi server and VirtualCenter environments
- Remote access and power control using HP® integrated Lights-Out (iLO), Dell® Remote Access Controller (DRAC), IBM®
  Remote Supervisor Adaptor (RSA) and IPMI service processors, plus RDP, VNC, SSH and Telnet in-band applications
- Available as a rack-mountable hardware solution or a VMware, Hyper-V or XenServer virtual appliance
- HTML Access Client interface, which allows the user to easily locate managed equipment in customizable views
- Centralized, role-based policy management, including controlled access privileges
- · Multiple client choices, including Java-free KVM and Serial Clients and integration with the Dominion KX III User Station
- Universal Virtual Media™ support through Dominion KVM-over-IP devices
- Consolidated logging and audit trail, including detailed activity reports
- New installed, desktop client for CC-SG administration with the use of Java or a browser

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### CommandCenter® Secure Gateway

Support for Dominion KX II, KX III and KX III User Station CC-SG supports access to servers, PCs and other IT equipment connected to the Dominion KVM-over-IP switches that provide virtual media and Absolute Mouse Synchronization™. CC-SG provides discovery, management, upgrades and many other management capabilities of the KX II and KX III devices.

CC-SG provides seamless integration of access through different Dominion products such as environments with mixed Dominion KX II and Dominion KX III devices.

CC-SG integrates with the Dominion KX III User Station

Support for Dominion SX, SX II and DSAM

CC-SG supports access to serial devices connected to the Dominion SX and new SX II serial console servers. Serial connections via the new Dominion Serial Access Modules (DSAM) connected to the Dominion KX III are also supported.

You get centralized management of multiple SX & SX II units along with access to serial devices connected to the KX III.

Virtualization: Integration of VMware

CC-SG provides streamlined, single sign-on access to your VMware virtualized environment, the ability to issue virtual power commands to virtual machines and hosts, and a topology view with one-click connections. CC-SG integrates with VMware environments and supports connectivity to VirtualCenter software, ESX/ESXi servers and VMotion™ functionality.

You get consolidated access, power control and auditing of both physical and VMware virtual servers.

Connectivity to virtual machines is always available even when these are moved from one virtual host to another.



# Features and Benefits

Access to Blade Servers Connected to Dominion KX II and KX III Devices

CC-SG supports access of blade servers connected to Raritan Dominion KX II and KX III switches. Supported blade models include Cisco, Dell, HP and IBM blade servers.

You can access all connected nodes from a single client, including blade servers, rack servers, IP tools, service processors, PDUs, virtualized systems and devices connected to Raritan's KVM solutions.

Dominion KX III User Station Integration

User Station users can login with their CC-SG login and password, and then access servers connected to CC-SG

Scalable and controlled user access Simplifies User Station configuration

Support for Raritan's Dominion PX, PX2 and PX3 You can add Dominion PX, PX2 and PX3 "smart" power strips located on the IP network. Once added to the CC-SG as a network-managed device, the Dominion PX allows access to the administrative interface via a single sign-on. Additionally, Dominion PX outlets can be associated to existing CC-SG nodes (servers).

Quick and easy remote power control of CC-SG managed servers.

Note: The option to connect PX PDU's to Dominion devices via a power Computer Interface Module (CIM) or power cable is also

available.

Your control of PX units can be independent of KVM or serial switches.

Support for Servertech CDU1 and PR02 PDU's

Administrators can add Servertech PDUs to CC-SG and associate outlets to CC-SG nodes (servers) to support remote power control

Quick and easy remote power managed servers.

You have the ability to connect to serial targets

Access to In-Band Applications and Embedded Service Processors

Servertech PDU's are managed via SNMP, independent of KVM or serial switches.

RDP, a common in-band console interface, can be used in either console or remote user modes. The RDP console allows the IT

administrator to be the only RDP user on the

Telnet and SSH are supported as in-band

serial console interfaces.

server while the session lasts

using the SSH and Telnet protocols.

You'll add flexibility by using RDP.

Service accounts can be created and stored on the CC-SG with an MD5 two-way encrypted password. Service accounts can be employed on all in-band interfaces to allow for use with remote or local authentication. Changing the service account password applies to all CC-SG

interfaces using that service account.

You'll reduce the configuration time required to reflect password changes.



# Features and Benefits

#### **Robust Security**

Low security profile, Linux®-based appliance architecture.

A powerful policy management tool allows access and control based on a broad range of user-customizable criteria, including time of day, physical location, application, operating system, department and function.

Available 128-bit and 256-bit AES encryption for end-to-end node access activity through AES-enabled Dominion devices.

Support for a broad range of authentication protocols, including LDAP, Active Directory®, RADIUS and TACACS+ in addition to local authentication and authorization capabilities.

Ability to import user groups from Active Directory.

Support for Two Factor Authentication with SecurID® on RADIUS servers.

Security updates and hardening; immune to the Heartbleed, Poodle, Freak and Shellshock vulnerabilities.

Disables SSLv3 and uses TLS for increased security. Administrator can select which TLS versions are utilized.

IP-based access control lists (ACLs), which grant or restrict user access by IP address.

Proxy mode for secure access to devices through firewalls/VPNs.

Strong user password authentication, SAS 70 compliance for configurable amounts of failed log-in attempts and user ID lockout parameters.

#### Neighborhood Configuration

A neighborhood of up to 10 CC-SG units can be deployed and work together to serve the IT infrastructure access and control needs of the enterprise. The units in a neighborhood may consist of hardware and/or virtual appliances. All units in a neighborhood must be running the same firmware version.

CC-SG is a powerful, hardened, secure access platform that delivers peace of mind to IT managers who need to provide secure access to vital corporate resources.

You can add more CC-SGs as your environment grows.

Performance is enhanced through the distribution of resources across CC-SGs.



# Features and Benefits

#### Cluster Configuration for Hardware Appliances

"Cluster" configuration provides appliance redundancy through primary and secondary CC-SG hardware appliances on different subnets and/or geographical locations.

CC-SG virtual appliances are not physically clustered. Raritan supports the VMware "High Availability" and "Fault Tolerance" features for easy-to-use, cost effective high availability. You get instant, seamless failover if the primary unit fails.

#### Web Browser Access to Various Web Based Devices and Systems

CC-SG supports Web browser access to various devices and systems via IP address or host name. Single sign-on via the Web browser interface is available in some applications that can accept automatic username and password entries. Access to the Dominion PX Web interface and Dell DRAC4 administrative UI are two examples of Web browser interfaces that support single sign-on.

CC-SG provides centralized and audited access to Web server-equipped devices such as KVM-over-IP switches, embedded service processors and many types of IP enabled devices.

#### Auditing and Audit Trail Reporting

The CC-SG administrator can sort the audit trail report based on categories. For example, the administrator can choose to view only authentication messages for remediation purposes, security messages for monitoring purposes or virtualization messages for virtual machine-related activity tracking.

CC-SG permits granular audit trail sorting for specific purposes like remediation, security and debugging.

# Remote Monitoring and Capacity Planning Tools

CC-SG provides a variety of tools to monitor real-time and historical performance of CC-SG. Once activated, these tools can capture or display information such as CPU, memory, hard disk space, etc.

CC-SG allows secure, remote monitoring tools that can be activated by customers to monitor their CC-SG hardware performance and alert them when action may be required on their part.

Using the real-time data capture tool, customers can view information in a graphic format and create email alerts based on thresholds they set. With the historical data trending reports, customers can see their CC-SG performance graphed over time.



# Features and Benefits

Streamlined Raritan Device Firmware Upgrade Process The Task Manager can upgrade multiple devices concurrently. In addition, the user can determine a time window for the automated upgrade task.

An improved Restart Device automated task has been created. The CC-SG administrator can choose multiple devices and restart them at a selected time.

At the completion of the task, there is an Upgrade Status report generated in addition to an auto-generated email alert.

This feature is particularly valuable in environments where a large number of Dominion devices are managed by CC-SG, whether in a data center or distributed environment.

DRAC 6, 7 & 8 Support

CC-SG provides access to Dell Remote Access Controller (DRAC) through the following interfaces:

- Telnet
- SSH
- Web browser
- IPMI power

Organizations with Dell servers who have migrated from DRAC 4 or 5 to DRAC 8 can conveniently access them through CC-SG.

Customers who need standard KVM access to some servers and access through DRAC to others can conveniently manage all resources through a single CC-SG client.

HP iLO, iLO2, iLO3 and iLO4 Support

CC-SG supports single sign-on console access to HP servers equipped with iLO processors. In addition, CC-SG provides remote power on/off/cycle and graceful shutdown capabilities to these HP servers.

CC-SG increases productivity in environments where servers with iLO are deployed along with CC-SG

Personal View Customization Using Node Groups

In addition to creating customized views by predefined categories, customized views can be created using predefined node groups. The CC-SG administrator can share custom views with all system users and, in addition, each user can create their own customized view using node groups and device groups.

Users can easily find the server or IT equipment they need to access.

By easily creating custom views and modifying them on the fly, CC-SG makes the IT staff's work easier and more productive.

Virtual Media

CC-SG supports control of virtual media access policies. Three options of authorization are available for virtual media: deny, control and view only. Virtual media is available for systems connected through a virtual media CIM to Dominion KX II, KX III, KSX II and KX2-101-V2 devices managed by the CC-SG.

This feature makes it easy to load software, copy data, reimage (apply a new OS), boot or upgrade the device remotely.

WS-API Support

An optional Web Services API is available for customers to integrate their own systems with CC-SG.

This allows access of CC-SG, connected nodes and other CC-SG functions from customer applications.



# Features and Benefits

Control Power for Servers Connected to any PDU Supported by Power IQ Enables power control of CC-SG nodes (Power IQ IT devices) that are connected to multivendor PDUs being managed by Power IQ — without leaving CC-SG.

CC-SG users that have also implemented Power IQ enjoy the convenience of remote power control of their IT infrastructure without leaving CC-SG.

Devices can be connected to any PDU that is managed by Power  ${\rm IQ}-{\rm including}$  non-Raritan models.

Synchronize Data with Power IQ

CC-SG pulls data from Power IQ for easy, convenient data synchronization.

Ensure that CC-SG and Power IQ have common infrastructure data

Save time by not duplicating data entry tasks. Node, interface, device, port and other information is easily synchronized.

Data Import/Export via CSV Files

CC-SG includes a very comprehensive import/export capability. CSV files can be imported to help expedite the process of configuring devices, nodes, users, associations and PDUs. Import/export files include:

- DUs. Import/export files include:
  Import and export of categories and
- Import and export of user groups and users
- Import and export of nodes and interfaces
- Import and export of devices and ports
- Power IQ import and export file

By maintaining information in a spreadsheet, administrators can easily manipulate data and save it as a .csv file for importing into CC-SG, saving time.

Administrators can leverage the data already in CC-SG, easily export data from CC-SG, make any necessary changes, then return it to CC-SG or use it in other applications.

Can also share data between CC-SG and Power IQ.

Virtual CC-SG Evaluation Version A software-only, VMware evaluation version of CC-SG is available, which can be installed on virtualized servers and PCs. The "Eval" is fully functional with a few exceptions:

- Supports a maximum of 16 "interfaces"
- Does not support the optional CC-SG WS-API

CC-SG can be evaluated without installing the hardware appliance. Simply install the virtual appliance on any virtualized machine running either VMware Player, ESX or ESXi. Please note that the evaluation version cannot be upgraded to a production version.

The evaluation can be downloaded from the Raritan website (www.raritan.com).

.NET™ KVM Client for Java-free Support on Windows CC-SG includes an "Active KVM Client" (AKC), which utilizes Microsoft®'s .NET technology instead of Java.

Both the CC-SG Admin and Access Clients support .AKC.

Client PCs may run on Windows® XP, Windows Vista® and Windows 7, 8 and 10 operating systems.

Provides the choice to use a .NET KVM client for those who prefer the Windows-based architecture.



# Features and Benefits

KX III Java-Free HTML KVM Client for Linux and Mac The new, Dominion KX III HTML KVM Client (HKC) is available for Linux and Mac platforms. For customers looking to minimize their use of Java, this HTML-based KVM Client runs in the browser and does not utilize Java or .NET. Requires Dominion KX III Release 3.4 or greater.

Provides on Linux and Mac, Java-free KVM-over-IP access for the Dominion KX III.

Java-Free HTML Serial Client for Dominnion SX II

The new, Dominion SX II HTML KVM Client (HKC) is available for Java-Free serial access. This HTML-based Serial Client runs in the browser and does not utilize Java or .NET.

Both the CC-SG Admin and Access Clients

support HKC.

Provides Java-free serial access for the Dominion SX II. The HTML Serial Client can be used on Apple IOS devices.

Windows 7, 8 and 10 Support

CC-SG supports the access of target devices running Windows 7, 8 and 10. The use of Windows 7, 8 and 10 on client PCs is also supported.

Organizations that are implementing servers and clients running Windows 7, 8 and 10 can conveniently upgrade existing CC-SG units to support their updated infrastructure — or install new CC-SGs without worrying about compatibility with these Microsoft operating systems.