Dialogic® PowerVille™ LB
Load Balancer for Real-Time Communications

Release 1.5 Release Notes

Copyright and Legal Notice

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Revision History

This section summarizes the changes made in this and, if applicable, each previously published version of the Release Notes for PowerVille LB Release 1.5, which is a document that is planned to be periodically updated throughout the lifetime of the release.

Revision	Release Date	Notes
2.1	November 2017	Updates to support PowerVille LB 1.5.2. Release Issues: • Added the following Resolved Defects: LB-607/310635, LB-615.
2.0	September 2017	Updates to support PowerVille LB 1.5.
1.4	May 2017	Updates to support PowerVille LB 1.4.10. Release Issues: • Added the following Resolved Defects: LB-440, LB-445, LB-449, LB-452.
1.3	March 2017	Updates to support PowerVille LB 1.4.8. Release Issues: • Added the following Resolved Defects: LB-376, LB-388/IPY00118512.
1.2	January 2017	Updates to support PowerVille LB 1.4.7. Release Issues: • Added the following Resolved Defects: LB-351, LB-356, LB-362, LB-369, LB-370, LB-374/IPY00118486.
1.1	December 2016	Updates to support PowerVille LB 1.4.6. System Requirements: Added a command and note for UDP. Release Issues: • Added the following Resolved Defects: LB-238/LB-224, LB-305, LB-306, LB-310, LB-319, LB-323, LB-326, LB-329, LB-333, LB-335/LB-334, LB-336, LB-337, LB-338, LB-339, LB-340.
1.0	November 2016	Initial release of this document.
Last modified: November 2017		

Refer to www.dialogic.com for product updates and for information about support policies, warranty information, and service offerings.

1. Welcome

These release notes address new features and issues associated with the Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications (also referred to herein as "PowerVille LB") Release 1.5. This is a document that is planned to be periodically updated throughout the lifetime of the release.

The release notes are organized into the following sections (click the section name to jump to the corresponding section):

- Overview: This section provides an overview of this release.

- Related Documentation: This section provides information about the documentation that supports this release.

- System Requirements: This section describes the system requirements for this release.

- Release Features: This section describes the new features and functionality in this release.

- Installation: This section provides installation information that is useful for getting started with this release.

- Upgrading: This section provides upgrading information that is useful for getting started with this release.

- Configuration: This section provides configuration information that is useful for getting started with this release.

- Licensing: This section provides licensing information that is useful for getting started with this release.

- Release Issues: This section lists the issues that may affect this release.

2. Overview

PowerVille LB is a software-based high-performance, cloud-ready, purpose built and fully optimized network traffic load-balancer uniquely designed to meet challenges for today's demanding Real-Time Communication infrastructure in both carrier and enterprise applications. The software-based PowerVille LB allows application developers, service providers and enterprises to dynamically scale, distribute and manage traffic associated with a diverse set of real-time and non-real-time applications deployed in today's networks across disparate applications and datacenters.

PowerVille LB

Dialogic is recognized as an industry leader in delivering software and virtualization solutions for communications networks. PowerVille LB is yet another advancement by Dialogic in delivering innovative software-based solutions to application delivery control (ADC) and network traffic management market segments. PowerVille LB can be deployed across leading commercial off-the-shelf (COTS) server platforms as well as leading hypervisors and cloud platforms. PowerVille LB supports a range of Application and Network services including advanced traffic management, web traffic management, traffic acceleration, encryption offload, protocol interworking and other core network services. The underlying software platform of PowerVille LB enables enterprise and service provider customers to rapidly provision consistent application services across hardware, hypervisor and cloud infrastructure.
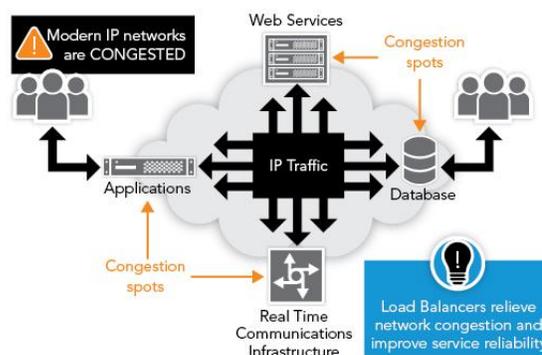
Related Information

See the following for additional information:

- PowerVille LB product page at http://www.dialogic.com/products/powerville/load-balancer-for-real-time-communications.aspx.

- PowerVille LB datasheet at http://www.dialogic.com/~/media/products/docs/lb/14449-powerville-loadbal-ds.pdf.

- PowerVille LB Release 1.5 documentation at http://www.dialogic.com/manuals/lb/powervillelb1-5.

- Dialogic Service Center at http://www.dialogic.com/support.

3. Related Documentation

This section provides information about the documentation that supports the PowerVille LB Release 1.5.

The following documents are available for the PowerVille LB Release 1.5 at http://www.dialogic.com/manuals/lb/powervillelb1-5.

Document	Description
Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications Release 1.5 Release Notes	Addresses new features and issues associated with PowerVille LB Release 1.5.
Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications Quick Start Guide	Describes how to install software and access the PowerVille LB Console for configuration management.
Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications Installation and Operations Guide	Provides instructions for installing, configuring, administering, and maintaining the PowerVille LB.
Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications Technology Guide	Provides an overview and describes the technology for the PowerVille LB.

4.   System Requirements

This section describes the system requirements for the PowerVille LB Release 1.5.

The system requirements are as follows.

Component	Requirement
Operating System	**Note:** 32-bit operating systems are not supported. Community ENTerprise Operating System (CentOS) 7.3 and 6.4 Oracle Linux 6.4 **Note:** The same version of CentOS must be used for each PowerVille LB in a high availability (HA) pair.
Processor	Intel Dual 56xx or greater
Ethernet	Up to 3 1000Base-TX (RJ-45)
Memory	8 GB RAM minimum
Storage	60 GB HDD minimum
Software	Install the latest update of Java Runtime Environment (JRE) version 8 (.rpm) on the target installation machine. As of June 2016, obtain the latest Oracle JRE 8 update at the following location: http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html. **Note:** The JRE is not required if the latest Oracle Java Development Kit (JDK) version 8 is installed.
UDP	For UDP transport, the following command needs to be applied to master and slave nodes: `iptables -I OUTPUT -t raw -p udp -j CT --notrack` **Note:** This command will not persist on reboot and must be reapplied.

Supported Virtual Machines

The supported virtual machines (VM) are as follows:

- VMWare ESXi 5.x.

5.   Release Features

This section describes the features and functionality supported in the PowerVille LB Release 1.5. For more information, refer to the documents listed in the Related Documentation section.

PowerVille LB Release 1.5

The key new features and functionality include:

Configuration Import/Export

In PowerVille LB Release 1.5, the PowerVille LB has been updated with the ability to import and export system configuration for ease of upgrade and for allowing configuration backup and restore. This feature will collect the PowerVille LB configuration data so that network operators and easily re-apply the configuration during an upgrade or system restore. The import/export feature covers system configuration, high availability configuration, services configuration, and security profiles.

For more information, refer to the *Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications Installation and Operations Guide*.

Previous Releases

For notable features and functionality included in PowerVille LB, refer to the PowerVille LB datasheet at:

http://www.dialogic.com/~/media/products/docs/lb/14449-powerville-loadbal-ds.pdf

6. Installation

There are two installation methods available:

- Command Line Installation
- Graphical Environment Installation

For details on these installation methods, refer to the instructions in the *Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications Quick Start Guide*.

7. Upgrading

To update the PowerVille LB software, the existing PowerVille LB software must be uninstalled and the new software must be installed following the PowerVille LB Installation procedure.

Prior to uninstalling the existing PowerVille LB software, capture the existing configuration settings (e.g., via screen dumps). The configuration settings need to be reapplied after the new PowerVille LB software has been installed.

For the full details of this upgrade procedure, refer to the *Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications Installation and Operations Guide*.

8. Configuration

Configuration is available via the PowerVille LB Console.

PowerVille LB Console

The PowerVille LB Console is a secure web-based GUI used to manage the PowerVille LB. The WebGUI can be reached using a web browser and the PowerVille LB IP address.

For more information, refer to the *Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications Quick Start Guide* and *Dialogic® PowerVille™ LB – Load Balancer for Real-Time Communications Installation and Operations Guide*.

9.   Licensing

When downloading PowerVille LB software, the customer must agree to the terms and conditions of an End User License Agreement (EULA). The assent to the EULA takes place via click-through before the software is downloaded. Additional automated licensing approaches are planned for adoption by Dialogic for the PowerVille LB software in future releases.

10. Release Issues

This section lists the issues that may affect the PowerVille LB Release 1.5.

Issues Table

The table in this section list issues that affect the PowerVille LB. The issues are sorted by issue type. The following information is provided for each issue:

- **Issue Type** – This classifies the type of release issue based on its effect on users and its disposition:
    - o **Known** – A minor issue. This category includes interoperability issues and compatibility issues. Known issues are still open but may or may not be fixed in the future.
    - o **Known (permanent)** – A known issue or limitation that is not intended to be fixed in the future.
    - o **Resolved** – An issue that was resolved (usually either fixed or documented) in this release.
- **Defect No.** – A unique identification number that is used to track each issue reported.
- **Release Version** – For defects that were resolved in a specific release, the release version is shown.
- **Product or Component** – The product or component to which the issue relates; for example, an API.
- **Description** – A summary description of the issue. For non-resolved issues, a workaround is included when available.

PowerVille LB

Issue Type	Defect No.	Release Version	Product or Component	Description
Resolved	LB-615	1.5.2	LB	LB stops forwarding generic TCP/DB traffic after failover of LB.
Resolved	LB-607/ 310635	1.5.2	LB	Unable to assign role to new user.
Resolved	LB-452	1.4.10	LB	Unable to log in to LB after a restart following service setup.
Resolved	LB-449	1.4.10	LB	There is a corrupt WebSocket header in message sent from LB to web browser.

Issue Type	Defect No.	Release Version	Product or Component	Description
Resolved	LB-445	1.4.10	LB	The endpoints do not populate SIP transport headers properly. The SIP Service changes the protocol from TCP to UDP without being transactionally aware.
Resolved	LB-440	1.4.10	LB	VIP is not accessible when more than two "Controlling Node Candidates" are shown for VIPs in HA system.
Resolved	LB-388/ IPY00118512	1.4.8	LB	When fetching a file via HTTPS, the file becomes corrupted with NULs and gets truncated.
Resolved	LB-376	1.4.8	LB	Improve support for 50 nodes behind the LB.
Resolved	LB-374/ IPY00118486	1.4.7	LB	There is an error when selecting SSL Type as Re-Encryption while configuring for HTTPS.
Resolved	LB-370	1.4.7	LB	Illegal Refer-To headers are passed through LB.
Resolved	LB-369	1.4.7	LB	LB should be more tolerant to certain missing route headers.
Resolved	LB-362	1.4.7	LB	The database IP tables rules are not deleted from NAT table.
Resolved	LB-356	1.4.7	LB	After installation, the installer leaves behind incorrect jar uninstaller and jetty installer tar file.
Resolved	LB-351	1.4.7	LB	Illegal Call-Info headers are passed through LB.
Resolved	LB-340	1.4.6	LB	There is an error when selecting SSL Type as Re-Encryption while configuring for HTTPS.

Issue Type	Defect No.	Release Version	Product or Component	Description
Resolved	LB-339	1.4.6	LB	Service VIP shows port of 0 is on Services screen if SIP port is not enabled.
Resolved	LB-338	1.4.6	LB	SIP service automatically enables WSS port if WS port is enabled.
Resolved	LB-337	1.4.6	LB	During startup, there is a confusing error message if LB receives SIP messages.
Resolved	LB-336	1.4.6	LB	When recursing, LB is not using Contact URI as the basis for new INVITE request.
Resolved	LB-335/ LB-334	1.4.6	LB	When adding or removing LB service, an exception occurs on the backup VIP Manager.
Resolved	LB-333	1.4.6	LB	The Rewrite R-URI option is not working as intended.
Resolved	LB-329	1.4.6	LB	The VIP Manager logging is not producing details of key events in the logs.
Resolved	LB-326	1.4.6	LB	The MGCP service configured with transport of TCP is unable to send ACK if MS responds with a 200 OK containing a Record-Route specifying UDP.
Resolved	LB-323	1.4.6	LB	The mechanism to easily view node status history of all services is missing.
Resolved	LB-319	1.4.6	LB	The NioPipelineParser will not handle short-form content-lengths and call-id headers correctly.
Resolved	LB-310	1.4.6	LB	The OPTIONS test script is missing the requisite magic cookie as specified in RFC 3261.

Issue Type	Defect No.	Release Version	Product or Component	Description
Resolved	LB-306	1.4.6	LB	The WS service in the LB requires a user to enter a SIP listening port in order for the LB to send the request on to the node, but the configuration should be easier.
Resolved	LB-305	1.4.6	LB	After 12 hours, LB call processing slows and begins to suffer high latency.
Resolved	LB-238/ LB-224	1.4.6	LB	There is verbose debug on the HTTP (Stateful) service.