Dialogic® PowerArchitecture - an Application Framework Architecture

Background

In the 30+ years that Dialogic has been delivering enabling technologies to developers of communications applications, the goal has always been to help developers create new and innovative applications faster and make them more efficient. Recently, pure-software products, including media servers and other virtualized network services and standards-based APIs, have reduced the effort to develop scalable cloud-based applications. There continues to be strong demand for greater application creation efficiency in both service provider and enterprise environments. Pent-up demand exists for white-label, ready-to-deploy and custom application building blocks and solutions that could be quickly customized and deployed.

Dialogic PowerArchitecture

Dialogic has introduced a layered architecture using application software building blocks, supported by a foundation of existing underlying Dialogic® technologies, leading third-party application servers, and cloud management systems. This architecture is complemented with resources from the Dialogic® Application Development Practice, a team of highly-skilled developers, focused on the customization effort needed to deliver finished applications to customers.

Development Methodologies

Recognizing that every application development situation is unique, Dialogic supports three application development methodologies, allowing customers to craft their new application in the way that best fits their needs:

- **Customer-developed with Dialogic® Enabling Elements** – using traditional development processes and APIs, the application software is developed using Dialogic® media server software, signaling software or classic board-level products. The development effort may be accelerated with Application Development Practice resources from Dialogic.

- **Application Development Practice Developed** – with extensive experience working with leading application server software platforms from Oracle, IBM, TeleStax and OpenCloud, along with Dialogic’s own PowerNova™ proprietary application server, the Application Development Practice creates the application for the customer.

- **White Labeled App Library available from Dialogic®** – Dialogic has pre-developed applications that are available for customers to use as is or customize.

Figure 01 – Dialogic® PowerArchitecture Application Framework Architecture
Practice at Dialogic is in a unique position to find the “best-fit” application environment for the customer’s requirements. With experience in integrating new WebRTC, IoT, video and NFV technologies, the practice brings deep expertise to bear – resulting in a low overall cost to develop and accelerated time-to-revenue.

**White-Label Application Library** – starting with one of an extensive library of Dialogic® PowerVille™ ready-to-deploy applications, the customer would apply their own branding and customization, creating a unique offering without costly and time-consuming development.

**Dialogic® PowerVille™ LB – Load Balancer**
A key element for large scale and resilient applications, 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.

**Dialogic® PowerVille™ Applications**
Dialogic’s PowerVille Applications – a community of ready-to-customize software applications, covering a spectrum of solutions for both enterprise and service provider deployments. Based on proven platforms, the portfolio of Dialogic applications and services can improve time-to-market, cut development costs, and reduce maintenance expenses.

**Dialogic® PowerVille™ ESS - Enterprise Services Suite**
PowerVille ESS is a suite of cloud-based services for Mobile Network Operators (MNOs), targeting lucrative enterprise segments, including micro, small, and medium Enterprise markets. PowerVille ESS offers MNOs monetization opportunities, as it enables them to capture new and emerging Enterprise opportunities.

**Dialogic® PowerVille™ CC - Cloud Centrex**
PowerVille Cloud Centrex (CC) is a carrier-class solution hosted in a cloud environment enabling Network Operators to offer hosted PBX and SIP trunking services to their business customers, while also offering basic and advanced Class 5 services to their residential customers.

**Dialogic® PowerVille™ AC - Audio Conferencing**
PowerVille Audio Conferencing (AC) is a complete conferencing platform that seamlessly integrates with existing IP, TDM, Mobile and converged networks, delivering superior quality and eliminating the need for costly operator administration. Robust enough to offer carrier-class conferencing services, yet simple enough to implement revenue-generating conferencing services quickly.

**Dialogic® PowerVille™ VC - Video Conferencing**
PowerVille Video Conferencing (VC) is a complete wideband/HD audio and HD video conferencing platform that seamlessly integrates with existing mobile/3G/4G (LTE) and IP/IMS converged networks, and is device-agnostic for maximizing market penetration. Supporting CIF, VGA, and 720p with H.264, PowerVille VC incorporates the power of WebRTC, making video conferencing available to virtually anyone using a website, addressing the “any device” challenge.

**Dialogic® PowerVille™ CI - Call Interceptor**
PowerVille CI is an intelligent solution that enables Network Operators to reach their intended subscribers with time-sensitive messages in real-time. Used for a variety of applications, including collections, promotions, up-selling, and SIP voice mail notifications and announcements, when the subscriber makes an outbound call, the call is routed to PowerVille CI, which will play a message for the type of subscriber selected based on business rules.
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Dialogic® PowerVille™ AA - Network Auto Attendant

PowerVille AA provides a network-based automated attendants that is of high-value, yet simple to use and affordable to deploy. With its carrier-class architecture and design, user-friendly Web Portal, and IMS support with integration to major telecommunications Equipment Manufacturers (TEMs), the PowerVille AA Network Auto Attendant can host an almost unlimited number of Tenants, for maximizing return-on-investment (ROI).

Dialogic Application Development Practice

Addressing the needs for specialized application development skills, Dialogic also offers access to a highly-trained team of software developers, versed in the process of customization and integration of application software into existing service provider or enterprise networks. Whether deployed on premise or in the cloud, the Application Development team can deliver the skills to accelerate deployment of new applications and value-added services.