




Product Assessment:	Volubill - CONTROL-IT Policy Manager
Report Date:	May 23, 2011
Analyst:	McGarvey, Joe
Service:	Service Provider Infrastructure 
Market:	IP Services Infrastructure 
Class:	Policy Control
Current Perspective:	

Summary

Current Perspective



The Volubill CONTROL-IT Policy Manager is competitive in the policy control segment of the telecommunications market. CONTROL-IT Policy Manager can be bundled into an integrated offering that may also include online charging, account balancing, and a subscriber profile repository (SPR), all built on a common framework: the Volubill Business System. VBS is designed to provide operators with commonality across its policy and charging control system. The CONTROL-IT Policy Manager component of the overall solution contains the 3GPP-compliant Policy and Charging Rule Function (PCRF), including the recently completed Release 9 specification. In addition to providing a policy and charging ecosystem that spans the IT and network domains of mobile operators, the Volubill policy control solution, introduced in 2008, offers operators a broad palate of policy rules that can be used to shape business models and service offerings. In addition, the platform has established a respectable deployment footprint, including a couple of Tier-1 operators among its customers base of 22 carriers, as of April 2011.

Similar to other competitors in the rapidly expanding policy management market, Volubill is largely attacking the opportunity from an IT-oriented perspective. Its CHARGE-IT Convergent Charging solution is a 3GPP-compliant online and offline charging system that has largely served as Volubill's flagship offering over the past few years. Unlike many of its IT-oriented rivals, however, Volubill has a history in network-oriented product development. As a result, the company is one of the few policy and charging vendors to complement its policy control offering with both charging and enforcement functions. In addition, the company's April 2011 introduction of a distributed version of its policy control product for network offloading and customer experience enhancement, the Volubill Edge Offload solution, leverages Volubill's network-oriented roots and helps to distinguish the product in an increasingly competitive market place. Similar to other policy control products introduced post-R7 of the 3GPP specification, the CONTROL-IT Policy Manager is access network-agnostic, with the platform being capable of correlating subscriber services across mobile and fixed networks. Volubill officials describe the Policy Manager as being "partially" PacketCable-compliant and expect full compliance by the end of 2011.

In terms of performance, a single CONTROL-IT Policy Manager server is able to handle between 1,000 and 5,000 transactions per second (TPS). This figure, which enables the Volubill platform to scale to tens of thousands of TPS on a multi-blade platform, puts the CONTROL-IT Policy Manager among the highest-performing platforms from competitors disclosing TPS ratings. The CONTROL-IT Policy Manager also enables operators to deliver a range of services, including bill shock prevention, fair usage policies, capped and nested capped service plans, QoS plans, on-demand service upgrades, capacity offload, content filtering, and others. Though the Volubill Policy Manager is integrated into the VBS framework, the Policy Manager is capable of functioning with third-party policy enforcement points, DPI equipment, and charging systems. The platform's ability to enable operators to alter and create new policies without the involvement of the equipment vendor, an important buying criterion for operators, is not well documented by Volubill. Though the company indicates that non-technical operator personnel are capable of creating new service plans based on the Policy Manager's rules engine, it does not provide detailed information about the product's service creation environment. Volubill is equally unclear in its

description of the product's support for the 3GPP's Diameter Routing Agent (DRA) specification, which was introduced to ensure policy integrity in environments with multiple PCRFs. Volubill officials say the platform's support for DRA is currently proprietary, which would present issues in a multi-vendor environment.

Overall, the CONTROL-IT Policy Manager is a solid product that blends together IT- and network-oriented functional modules. It also provides a unifying framework that simplifies operational aspects of the policy and charging subsystem for operators that deploy an integrated solution from Volubill. The tight integration between Volubill's PCRF and its online charging system (OCS) also enables operators to deploy a pre-integrated policy and charging subsystem, a potentially important consideration given the fact that standards that provide a communications interface between the PCRF and OCS have yet to solidify. Though Volubill may trail more seasoned policy control providers in the number of deployments, the 20 or so commercial deployments for Volubill are respectable for a product only available since 2008. In addition, the Volubill Policy Manager has attracted several high-profile customers, including 17 Orange subsidiaries and Telefonica Movistar.

Strengths and Weaknesses

Strengths

- The Volubill CONTROL-IT Policy Manager is built on a common framework that provides integration with related subscriber-experience/customer care applications, such as SPR, account balancing, policy enforcement, and charging. In addition to providing operators with common controls for multiple components in a policy and charging ecosystem, the framework enables Volubill to offer operators a charging system that is pre-integrated with the PCRF, eliminating the need for additional systems integration or the interoperability requirements of multivendor solutions.
- The Volubill CONTROL-IT Policy Manager is part of a policy and charging solution that crosses the boundaries between the IT and network organizations of an operator. Unlike other IT-oriented software suppliers that have recently launched policy control products, Volubill is able to claim internal expertise at the network layer that is validated by the company's policy enforcement products and recently introduced Edge Offload solution. The company's networking history provides a point of differentiation with many of the company's IT-oriented competitors.
- The CONTROL-IT Policy Manager is compatible with multiple off-the-shelf hardware platforms. The Volubill software is portable to both SUN/Oracle and IBM BladeCenter hardware. Another aspect of the product's openness is its ability to be deployed with third-party adjacent functional modules. In addition to third-party charging platforms, the Volubill policy control solution is also compatible with multiple third-party policy enforcement products, such as those from Sandvine, Cisco, Ericsson, and Huawei. Support for adjacent functional models

Weaknesses

- Despite Volubill's history and familiarity with the networking operations of carriers, competitors will portray the company as an IT-oriented (charging) software supplier that has recently introduced policy control products in an attempt to penetrate a suddenly popular and potentially lucrative segment of the market. Ignoring the company's roots, competitors will portray Volubill as a charging expert that lacks knowledge or experience in the network. In addition, Volubill risks getting lumped in with (in terms of market perception) the flurry of products that have been introduced in the policy space over the past couple of years, further diluting the company's market cache.
- The Volubill CONTROL-IT Policy Manager is compliant with most major standards governing policy control. Its compliance with the 3GPP Diameter Routing Agent (DRA) specification and PacketCable standards appear, however, to be partial. Until Volubill better clarifies this, or it completes full compliance with these standards-oriented requirements, the Policy Manager will be vulnerable in comparison to competitive products that offer unambiguous support.
- The Volubill CONTROL-IT Policy Manager is similar in market positioning to offerings from other policy and charging control makers approaching the market from an IT orientation, such as Openet. Volubill, however, lacks some of the market validation achievements of an Openet, such as high-profile deployments or potentially lucrative reseller agreements with equipment suppliers (e.g., the relationships Openet has with independent network equipment makers Cisco, IBM, and Juniper Networks).

expands the product's addressable market significantly. The Volubill CONTROL-IT Policy Manager is also access-agnostic, giving operators the ability to centralize policy control across multiple types of access networks.

- Volubill officials say that 22 operators, as of April 2011, have commercially deployed the Policy Manager, making it one of the more prolifically deployed products on the market. Though only available since 2008, the CONTROL-IT Policy Manager has amassed roughly half of the deployment footprint of rivals that have been in the market several years longer. Given that a successful deployment history is one of the major factors influencing purchasing, Volubill is able to claim that it has assembled a customer roster sufficient to validate the deployment readiness of its policy controller.

- The Volubill PCRF was originally designed for the 3GPP Release 7 specification, which first defined the policy and charging control functions for mobile networks. Accordingly, Volubill can make the claim that its product was purpose-built for the unique demands of the mobile network, in terms of its ability to scale and its flexible decision engine. Unlike older products that were originally designed for fixed environments, the Policy Manager does not require retrofitting to meet the requirements of mobile environments.

Metrics

Metrics

Maximum TPS for Single System	TPS is dependent on platform, service weight, and deployment architecture. It can range from 1,000 to 5,000 TPS per server, based on CONTROL-IT Policy Manager r5.3 (Nov. 2010).
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Hardware Platform	Sun/Oracle – Solaris IBM Blade – Linux
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Related components	CONTROL-IT Policy Manager is based on a framework: Volubill Business Systems. VBS also delivers CHARGE-IT Convergent Charging, a 3GPP OCS/OFCS-compliant function. VBS also provides common functionality, including subscriber profile repository, notifications, device-sensitive customer self-care & personalization, captive portal, reporting, and customer care.
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CONTROL-IT Policy Enforcer is a PCEF function with full DPI, shaping, and metering capability. Policy

Manager (and Convergent Charging) comes pre-integrated with this capability or other third-party vendors.

CHARGE-IT Service CONTROLLER is a granular charging function with full DPI, traffic holding, and metering capability. It too comes pre-integrated with Convergent Charging and Policy Manager (or third-party vendors).

Customer Notification	<p>CONTROL-IT Policy Manager can generate e-mail and SMS notifications.</p> <p>Different messages can be sent at different thresholds of commodity usage, network triggers (e.g., bearer failure, network change, location change, on connection, etc.), and service conditions (e.g., use of specific applications, time bands, upgrade opportunities, etc.).</p> <p>Policy Manager can also dynamically create captive portals and instruct HTTP redirects for in-line customer dialogue.</p>
Access Agnostic	<p>Yes</p>
Location of Usage Tracking, Balance	<p>Monetary balance can either be located in the CHARGE-IT Convergent Charging or in an external system such as the IN or billing platform for pre- and postpaid customers.</p>
Support for Northbound Interfaces into BSS	<p>The VBS platform supporting Policy Manager provides full access to northbound systems with monitoring and redundancy management capabilities to ensure end-to-end real-time performance.</p> <p>The VBS platform supporting Policy Manager also has a full API set (SOAP/XML and CORBA), allowing a northbound system to provision data directing for Policy Manager.</p>
Compliance with 3GPP	<p>CONTROL-IT Policy Manager is 3GPP Release 9 (and previous versions) compliant. This includes usage monitoring and metering.</p>
Compliance with 3GPP DRA	<p>The objectives of DRA are built into the VBS framework supporting Policy Manager and related products. It directs Diameter protocols to the relevant functional components to decode and respond accordingly.</p>
Support for Gx interface (all variants)	<p>Yes, Policy Manager supports standard 3GPP and vendor-specific Gx interfaces.</p>
Support for Subscriber Profile	<p>Yes, Policy Manager has a comprehensive subscriber data management (SDM) component supporting at minimum full SPR requirements. The SPR/SDM can be provisioned by external systems using a SOAP/XML & CORBA API set.</p>

Alternatively, Policy Manager can also integrate

with external SPR/SDM systems.

Support for S9 Interface	Yes
Compliance with PacketCable PCMM	Yes, partial currently; full compliance in 2011
Service Plan Support	CONTROL-IT Policy Manager supports service, customer experience, network control, and functional use cases. This includes bill shock management, fair usage policies, capped service plans (volume/time), nested capped service plans, QoS services plans, on-demand service upgrade, service personalization, notifications, captive customer dialogue, capacity offload, RCS/IMS/VoIP, parental control, mutual accounts, app stores, cloud service QoS/charging, machine-to-machine, prioritized plans, RAN congestion management, smart routing, and granular content/application charging and control.
Cell Congestion Management	Yes
Live Deployments	22 Policy Manager deployments
Top Public Customer References	Orange (17 subsidiaries), Telefonica Movistar & Vivo, Digicel Group
Largest Live Deployment Based on Transactions per Second	Telefonica Movistar (TPS information not provided)
Full Policy and Charging Control System	Yes
Interoperability Partners for DPI and Charging (deployed in the field and through lab IOT)	Sandvine, Cisco, Ericsson, and Huawei
Support for Persistent Geographic Redundancy	Yes, using built-in and Oracle technologies
Ability to Maintain Sessions State	Yes, the VBS platform collates every subscriber session in its own session repository. This is viewable by the operator and used for both policy management and charging.

Year Product 2008
Was
Commercially
Introduced

3GPP R7
Release on
which
Original
Designed
Was Based

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