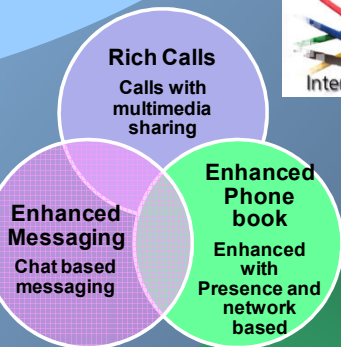
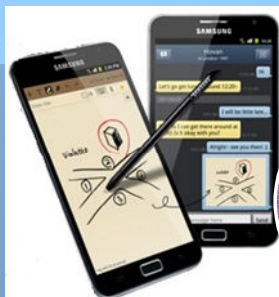


Primal Technologies' Rich Communication Services (RCS)

RCS marks the transition of messaging and voice capabilities from Circuit Switched technology to an all-IP world, thereby strategically allowing the network operator the capability to offer an improved user experience to their subscribers from many different devices and across many forms of communication, including voice calls, chats, videos and file sharing among others. RCS and Voice over Long Term Evolution (VoLTE) share the same IP Multimedia Subsystem (IMS) investment and leverage, the same IMS capabilities and interworking specifications between network operators.

From the very beginning, Primal Technologies' Open Services Platform and Service solutions were architected to support different access types, including CDMA / 1X / EVDO, GSM/UMTS, landline and cable companies. Primal Technologies today has many deployments with network operators having multiple networks. This services architecture has similarly evolved to take advantage of the IMS/RCS functionality and messaging requirements with no data migration necessary. This approach allows an operator to continue to support 2G/3G messaging within the same network (or with other roaming partners). Primal has also been supporting a Unified mailbox and SIP Call Control and SIP Message Waiting Indication with cable operators for many years.

The Primal RCS SMSC includes the IP-SM-GW module with SMS IWF in order to support SIP/SIMPLE messaging from/to Joyn/RCS clients and Sh DIAMETER messaging with the HSS, while simultaneously supporting legacy 2G/3G handsets and pre-IMS networks. Primal Technologies supports the ISC-SIP protocol on the signalling plane with an S-CSCF for call/message management and charging within the IMS network.



RCS Features

- Enhanced Advance Pay/Prepaid, SMSC, MMS, Data OCS, Unified Visual VM Service features to simplify RCS rollout for operators
- Improved subscriber experience with RCS handset clients
- Supports communication across wireless phones and tablets, etc
- RCS SMSC and MMS supports Display name from inviting client
- Supports Tel URI or SIP URI (user=phone) as per RCS 5.1 / CPM v2.0
- Supports IMS/RCS interworking with S-CSCF/HSS and 2G/3G networks simultaneously
- Seamlessly fits with other IMS network elements
- Primal IP-SM-GW module supports Sh DIAMETER with the HSS to detect the recipient's preferred method of delivery
- IP-SM-GW SIP Proxy of REGISTER messages
- 3GPP 32.299 support (Diameter charging applications)
- 3GPP TS 24.341 (SMS over IP networks), OMA SIMPLE (OMA-TS-SIMPLE_IM-V2_0)
- RFC 3261 (Session Initiation Protocol), RFC 3428, RFC 3680, RFC 4975, 4976 (MSRP and Relay extensions)
- 3GPP TS 29.329 (Sh Interface)

Skylight and Skynet Integration

- Complete subscriber management regardless of access type
- Chargeable and non-chargeable CDRs generated for every transaction
- Customer Service Real-time access to all Events/CDRs
- Engineering Real-time Monitoring
- Finance Access to Hourly, Daily, Weekly, Monthly, Revenue Generation
- System and Revenue Performance Monitoring