

# ASF - Advanced Service Framework

*Achieving Maximum Interoperability of Presence-Based Services on IMS/RCS, Internet Gtalk/XMPP, and LDAP networks*

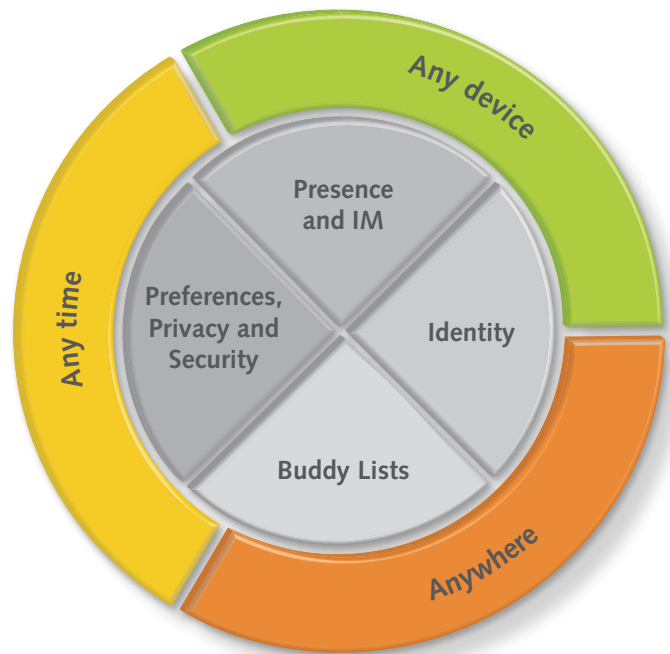
## Overview

While SIP is the de-facto standard and a foundation for the development of real-time communications applications, such as Voice over IP and Video over IP, IMS-SIP is fast becoming more popular and widespread. Using open standards such as IMS SIP on NGN networks provides a solid foundation for the development of flexible communications solutions for IP networks. One of the great enhancements of the traditional ad hoc process is the concept of Presence. With Presence, the call initiator is aware of the Presence state of the other party, and based on that, chooses the most efficient and suitable communications vehicle.

## Challenge

Most Presence solutions are proprietary in nature, requiring a complete infrastructure and end-to-end implementation in a closed environment. Popular Presence-Based applications often operate in "silos," with no immediate and intuitive way to interoperate between them. In addition, there are several different standards for Presence-Based services: SIMPLE OMA for IMS and RCS compliant networks, and XMPP for Internet based services like Gtalk. Implementation of presence-based communication applications requires a number of technological blocks to be available, and these challenges need to be addressed:

- Standards-compliance
- Interoperability
- Ease of use
- Fast time-to-market
- Low overall solution cost
- Need for high quality



## IMS Services and RCS Initiative

RCS (Rich Communication Suite) is an initiative of the GSM Alliance (GSMA). RCS aims to speed up and facilitate the adoption of applications and services that provide an interoperable, convergent, rich communication experience based on IMS. From the end-user's perspective, RCS facilitates services such as instant messages, buddy lists and video sharing among users and devices across different networks.

The main elements of RCS are:

- An enhanced Phonebook with service capabilities and Presence-enhanced Contacts information
- Enhanced Messaging, which enables a large variety of Messaging options, including Chat and Messaging History
- Enriched Call, which enables multimedia content sharing during voice calls.

The implementation of RCS is based on the same SIP IMS as its core protocol, with SIMPLE, XDM and MSRP providing actual service-layer support.

## RADVISION Solution

RADVISION Advanced Services Framework provides high level APIs that hide all standard complexities such as RCS, XDM, MSRP, SIP, XMPP or LDAP knowledge, and allows to develop fully interoperable Presence Based Services with ease. It includes all necessary elements for development of RCS compliant, standards-based presence-enabled solutions over IMS and NGN networks, such as SIMPLE for Presence service, XDM for management of buddy lists and preferences, and MSRP for Instant Messaging and File Transfer. All components are feature-rich, provide flexible and powerful APIs and are built to support demanding requirements of communication applications.

The ASF also enables Presence Based Services over the Internet Gtalk/XMPP standards, as well as LDAP capabilities and includes a fully integrated address book.

The RADVISION ASF, provides true Presence Based Services interoperability over and between Telecom, IMS, RCS compliant, Gtalk/XMPP, and LDAP networks.

Using RADVISION Advanced Services Framework reduces time to market, lowers costs and guarantees the highest level of standards compliance and interoperability in the industry to assure successful delivery of the presence-based communications solutions.

## ASF Features at a Glance

ASF capabilities include the following:

- SIMPLE OMA Presence support
- XDM and XCAP support
- Gtalk/XMPP support
- LDAP support
- MSRP support
- Contact List Management
- Presence State Management
- Integrated address book implementation
- Protocol agnostic high level APIs
- Support for a wide variety of operating systems and easy portability to additional ones

### FW/NAT-Traversal Toolkit

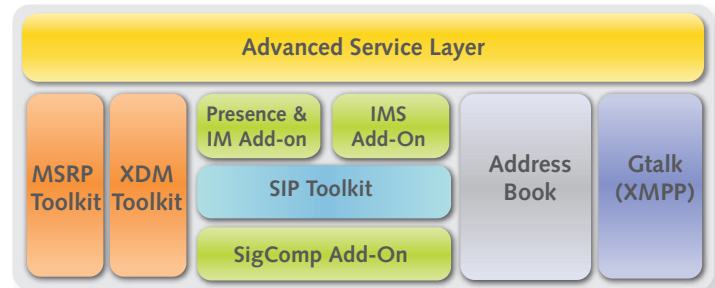
The RADVISION FW/NAT Traversal Toolkit is an optional component that can be used in conjunction with any other signaling protocol. It supports the STUN, TURN and ICE mechanisms and can be used to build traversal solutions for a wide variety of Firewalls and NATs.

## RADVISION's Advanced Services Framework

Continuing its leadership in SIP IMS Development tools, RADVISION offers a complete Advanced Services Framework (ASF) that implements all the standards necessary to create Presence-Based communication devices and applications for IMS and NGN networks. The ASF provides high level APIs that hide all standard complexities such as RCS, XDM, MSRP, SIP, XMPP or LDAP knowledge, and allows to develop fully interoperable Presence-Based services with ease.

The ASF runs on top of the SIP IMS Core layer, which in turn utilizes the operating systems and hardware abstraction layer (called Common Core).

ASF consists of the RADVISION SIMPLE, XDM and MSRP Toolkits as well as a fully integrated address book, and includes Gtalk/XMPP and LDAP capabilities.



### Key Solution Benefits:

- Fully standards-compliant developer solution for Presence and Instant Messaging
- Versatile set of tools for the development of Chat or Instant Messaging applications
- Can be used on any desktop, embedded, and mobile platform
- Enables Standard File and Image Transfer
- Rich Contact List Management capabilities
- RCS, NGN, and IMS-compliant
- Full solution for NAT-challenged services
- Interoperable with Gtalk/XMPP
- LDAP capabilities

### Where ASF can be used?

ASF can be used to enhance a wide variety of devices and applications:

- Mobile phones/PDA
- PCs and embedded voice/video/chat clients
- Set-top boxes and IPTV clients
- Video-share applications
- Interactive TV
- Gaming applications and appliances
- Collaboration solutions

### About Radvision

Radvision, an Avaya company, is a leading provider of video conferencing and telepresence technologies over IP and wireless networks. We offer end-to-end visual communications that help businesses collaborate more efficiently. Together, Radvision and Avaya are propelling the unified communications evolution forward with unique technologies that harness the power of video, voice, and data over any network. [www.radvision.com](http://www.radvision.com)

USA/Americas  
T +1 201 689 6300  
F +1 201 689 6301  
[infoUSA@radvision.com](mailto:infoUSA@radvision.com)

EMEA  
T +44 20 3178 8685  
F +44 20 3178 5717  
[infoUK@radvision.com](mailto:infoUK@radvision.com)

APAC  
T +852 3472 4388  
F +852 2801 4071  
[infoAPAC@radvision.com](mailto:infoAPAC@radvision.com)

**RADVISION®**  
an Avaya company