

Application Session Controller Enterprise application guide

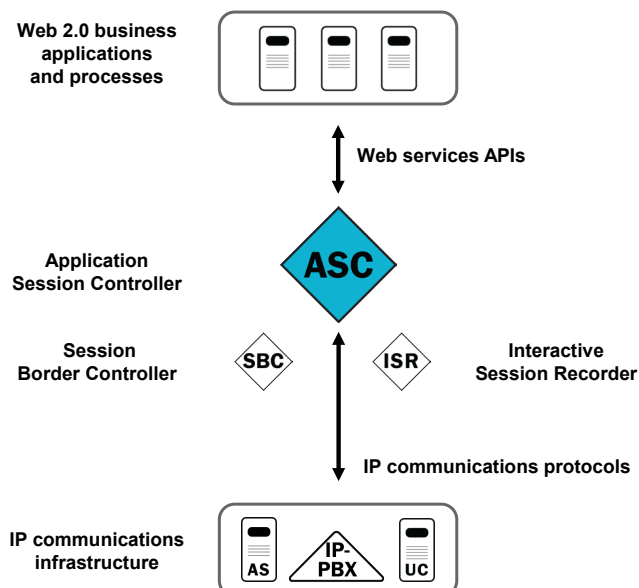
Purpose

This guide describes potential applications for the Acme Packet Net-Net Application Session Controller (ASC). It provides a brief functional overview of the ASC and offers examples of how the solution can be used to communications-enable various applications and workflows. The applications described are only illustrative and do not represent solutions ready for sale. The guide is intended for enterprise IT professionals, systems integrators and ISVs considering the development of communications-enabled applications that enhance business practices and improve internal communications and customer interactions.

Net-Net Application Session Controller overview

Acme Packet's Net-Net Application Session Controller (ASC) is advanced middleware that lets enterprises and third-party software developers integrate interactive IP communications services with business applications. By adding interactive voice, video, and messaging to Web sites and software applications, and intelligently orchestrating sessions based on presence information and business rules, organizations can eliminate process inefficiencies and improve decision making, employee productivity and customer service.

The ASC allows Web developers to use familiar service-oriented architecture (SOA) development tools and frameworks to easily establish and control interactive IP communications sessions. It provides a communications abstraction layer that shields developers from the complexities of the underlying IP communications infrastructure so they can focus on business innovation. The solution helps development teams save time and money by reusing service components and making more efficient use of development resources. The ASC complements and extends Acme Packet Session Border Controller (SBC) and Interactive Session Recorder (ISR) solutions.



Applications

- Broadcast notifications
- Communications-enabled workflows
- Compliant communications
- Context-aware click-to-call
- Customized notifications
- Outbound video sharing

Benefits

- Rapid communication to select audiences
- Remove latency from business processes
- Leverage social media audiences
- Ensure compliance
- Improve customer responsiveness
- Increase contact center agent productivity

Functions and Features

- Rich communications abstraction layer
- Integrated session control for signaling and media
- Advanced service orchestration
- Fully standards-based solution
- Flexible session control and routing policies
- Extensive compliance logging
- Carrier-class high availability operation
- Comprehensive management

Broadcast notifications

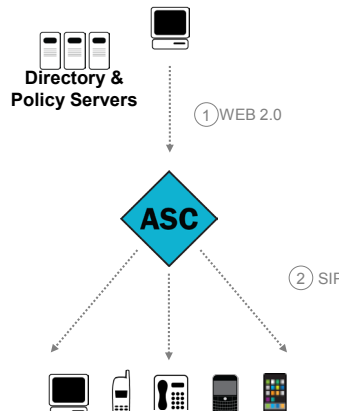
Synopsis

Businesses, government agencies, schools and universities can leverage the ASC to automate broadcast announcements. Voice, SMS or email messages can be delivered to a community of users en masse for emergency announcements, informational notifications or to promote products, events or services. SIP communications protocols enable the message to reach virtually any type of mobile or fixed communications device, including cell phones, laptops, tablets and PCs. Broadcasts can be scheduled in advance or initiated on an ad-hoc basis to administratively-defined user communities.

Key advantages and benefits

- Enables a variety of applications – reverse 911, emergency notifications, voice blasts
- Supports multiple communications channels – voice, SMS, email
- Integrates with existing directory systems and communications infrastructure
- Supports ad-hoc or scheduled notifications

Simplified implementation example



1. Notifications defined and scheduled. Data from external directory and policy servers is used to determine best communications channel.
2. ASC notifies recipients via recorded voice, SMS or email.

Communications – enabled workflows

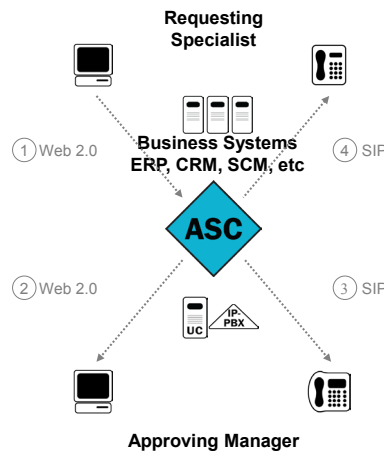
Synopsis

Enterprises can use the ASC to add interactive communications to automated business processes. Presence-based voice, video or chat sessions can be integrated into workflows to expedite decision making and remove human latency from business processes. Sessions can be established automatically as part of Supply Chain Management (SCM), Customer Relationship Management (CRM), Enterprise Resource Planning (ERP) or other back-office system events.

Key advantages and benefits

- Removes human latency from business practices
- Expedites and improves decision making
- Enhances a wide range of applications – ERP, CRM, SCM, etc.
- Supports multiple communications channels – voice, video, instant messaging

Simplified implementation example



1. Specialist submits order requiring approval by an on-duty manager. ASC uses business logic and presence information to identify available Approving Manager.
2. Contextual data provided to Approving Manager.
3. ASC initiates voice call to Approving Manager.
4. ASC adds Requestor to call.

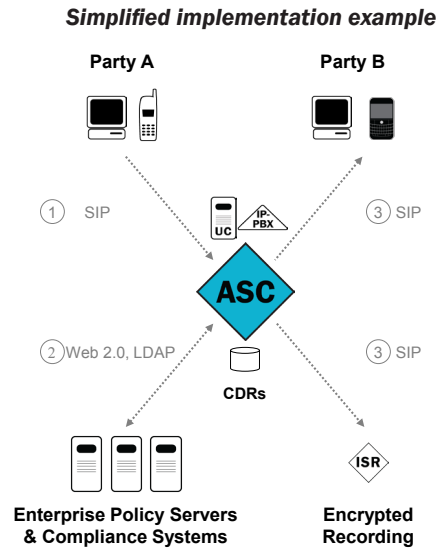
Compliant communications

Synopsis

Healthcare providers, financial services organizations government agencies and other businesses are required by law in many countries to log, record or secure certain electronic customer interactions. The ASC can be used to institute rich session control policies for all forms of interactive IP communications – voice, video, instant messaging – on a wide range of communications devices. Organizations can create fine-grained policies to block, replicate or capture sessions to ensure compliance with government and internal procedures.

Key advantages and benefits

- Ensures compliance with industry and government regulations
- Enforces uniform policies across diverse communications channels (voice, video, I/M)
- Offers central administration and control
- Provides comprehensive call detail records (CDRs) for all sessions



1. ASC acts as the central call control authority for enterprise communications. Party A attempts to contact Party B.
2. ASC queries enterprise policy servers.
3. ASC allows, blocks, forks call based on policy.

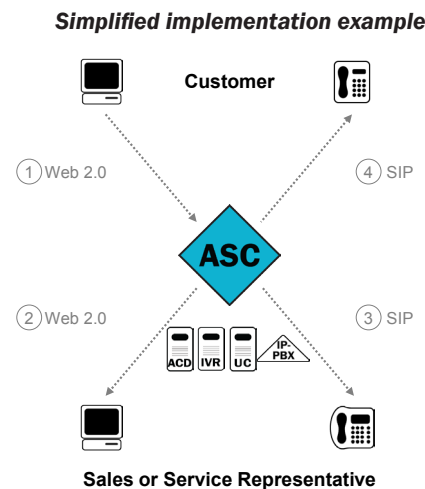
Context-aware click-to-call

Synopsis

Contact centers can improve sales and service by providing agents pertinent customer context as part of call set-up. Context can be captured from SIP sessions or Web pages with click-to-call capabilities, including social networking and social media sites or customer-facing Web sites. When a user initiates a chat or voice session, the user's Web page, social media user profile, or session signaling can be used to efficiently route calls to the sales or service representative who is best qualified to assist based on skills, spoken language or other administratively-defined attributes or business rules. Contextual data can be shared with a CRM application, which delivers it to the agent in the form of a screen pop. By automatically providing sales and service representatives with meaningful customer information businesses can streamline transactions and reduce or eliminate IVR interactions.

Key advantages and benefits

- Enhances customer experience; improves customer satisfaction and retention
- Reduces IVR input; eliminates repetitive information exchanges
- Increases agent productivity; reduces call lengths
- Enables personalized or priority services for high-value clients



1. Customer selects click-to-call icon. Contextual data forwarded. ASC uses business logic and presence information to identify best sales or service rep.
2. Contextual data presented in CRM screen pop.
3. ASC initiates session with sales or service rep.
4. ASC adds customer to session.

Customized notifications

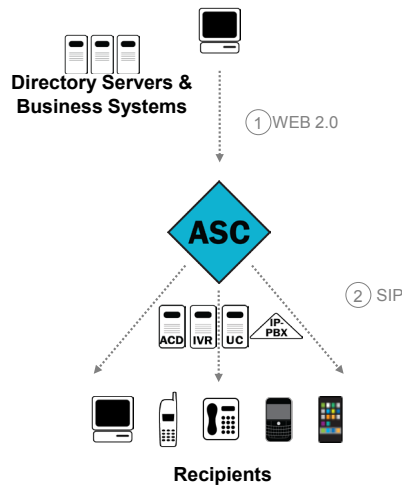
Synopsis

Enterprises can leverage the ASC to deliver customized notifications in an automated fashion. Tailored voice or SMS messages can be delivered to individuals for appointment reminders, transportation and delivery logistics, or as part of outbound campaigns. The recipients can be redirected to an IVR system to confirm, cancel or reschedule services.

Key advantages and benefits

- Enables a wide range of applications – appointment reminders, business promotions, delivery confirmations, flight reminders, transportation logistics
- Supports multiple communications channels – recorded voice, SMS, email
- Integrates with existing IVR, ACD and UC systems
- Provides comprehensive call detail records (CDRs) for all sessions

Simplified implementation example



1. Announcement triggered. ASC accesses external directory servers and business systems to determine best communications channel.
2. ASC establishes session with Recipient. Recipient redirected to IVR at end of announcement.

Outbound video sharing

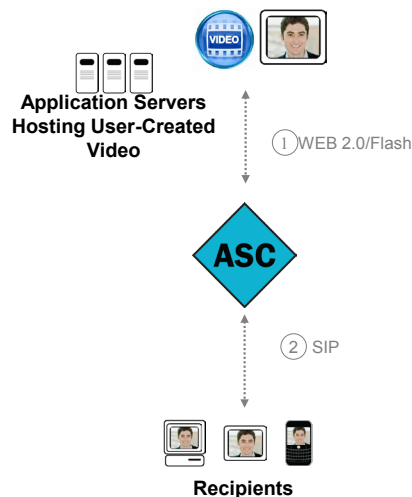
Synopsis

Enterprises can leverage the ASC to orchestrate IP video events. The ASC can be used to announce the availability of new video content (i.e. company-wide meetings or other announcements) via voice, SMS or email messages, allowing recorded videos or streaming video feeds to be disseminated rapidly and efficiently. Notifications can be scheduled in advance or initiated on an ad-hoc basis to distinct user communities.

Key advantages and benefits

- Enables rapid dissemination of video
- Supports multiple forms of notification – voice, SMS, email
- Works with recorded or streaming video
- Supports ad-hoc or scheduled notifications

Simplified implementation example



1. Video is captured/created
2. ASC notifies recipients new video is available
3. ASC converts flash media streams to RTP

ASC specifications

Web services APIs	<ul style="list-style-type: none">• REST, SOAP and WSDL over HTTP or HTTPS
IP communication protocols	<ul style="list-style-type: none">• SIP and H.323
Signaling control	<ul style="list-style-type: none">• Initiate, terminate and redirect SIP and H.323 sessions.• Retrieve presence state and location information
Media control	<ul style="list-style-type: none">• DTMF interworking and transcoding• Session recording (audio, video, I/M)• Voice activity detection with call hold, park, drop support• Selective audio file insertion (voice drop, voice blast)
Session control and routing policies	<ul style="list-style-type: none">• Rich telephony routing policies (i.e. least cost routing)• External routing engine with access via Diameter• External per user, per service policy access via LDAP
Compliance logging	<ul style="list-style-type: none">• Session accounting for all attached servers and services• External logging (RADIUS, SQL)• Fully-customizable call detail records (CDRs)
Management	<ul style="list-style-type: none">• Embedded browser-based management GUI• Embedded CLI• Support for third-party enterprise management systems
High availability	<ul style="list-style-type: none">• Fully-redundant deployment options• Full hitless and stateful failover for SIP signaling and media services
Operating environments	<ul style="list-style-type: none">• Intel x86-class servers (Contact Acme Packet for a list of validated server platforms)• VMware or Xen virtualized server environments
Bundled development tools	<ul style="list-style-type: none">• WSDLs, Java documentation and source files, sample scripts• Graphical desktop application for generating SOAP messages

Learn more

Additional ASC information can be found at <http://www.acmepacket.com/asc>, including demo applications, data sheets, solution notes and customer case studies.

To learn more about how ASC can help your organization gain a competitive advantage by adding interactive IP communications to business applications, please contact your Acme Packet Account Manager, Acme Packet Authorized Pinnacle Partner or visit www.acmepacket.com.



100 Crosby Drive
Bedford, MA 01730 USA

t +1.781.328.4400
f +1.781.425.5077
www.acmepacket.com

© 2011 Acme Packet, Inc. All rights reserved. Acme Packet, Session-Aware Networking, Net-Net and related marks are trademarks of Acme Packet. All other brand names are trademarks or registered trademarks of their respective companies.

The content in this document is for informational purposes only and is subject to change by Acme Packet without notice. While reasonable efforts have been made in the preparation of this publication to assure its accuracy, Acme Packet assumes no liability resulting from technical or editorial errors or omissions, or for any damages resulting from the use of this information. Unless specifically included in a written agreement with Acme Packet, Acme Packet has no obligation to develop or deliver any future release or upgrade or any feature, enhancement or function.

09/16/11