Sky Networks Infrastructure Solutions

Interconnection and Service Delivery across all Network Borders and Topologies

The SKY DANCE™ (Distributed Adaptive Network Control Environment) Session Controller and SIP Proxy form the basis of Sky Networks infrastructure solutions and are used to interconnect service providers with a trusted solution that provides security, service assurance, interworking, service reach and regulatory compliance at all network borders and across all network topologies. Whether a service provider is delivering voice, video and multimedia sessions across IP borders, interworking with SS7 SCPs or SIP based application servers, or combining calls and services from multi-vendor networks, the Sky Networks solutions are up to the job. With protocol support for SIP and optional MGCP, SIGTRAN and H.323, the session controller interconnects calls and services across all networks including wireline, cable and wireless networks. These capabilities enable service providers to accelerate revenue by simplifying the setup, control and management of often complex networks.

The SKY DANCE architecture is an IMS-ready, scalable, distributed clustering architecture that can scale from 250 to over 100,000 simultaneous sessions. It resolves the issues you face when building new VoIP networks or interconnecting with preexisting networks such as:

• Connection to customers behind firewalls
• Secure interconnection with other service providers
• Signaling interworking
• Billing mediation
• Service Access and Mediation
• Regulatory compliance

Sky Dance Architecture

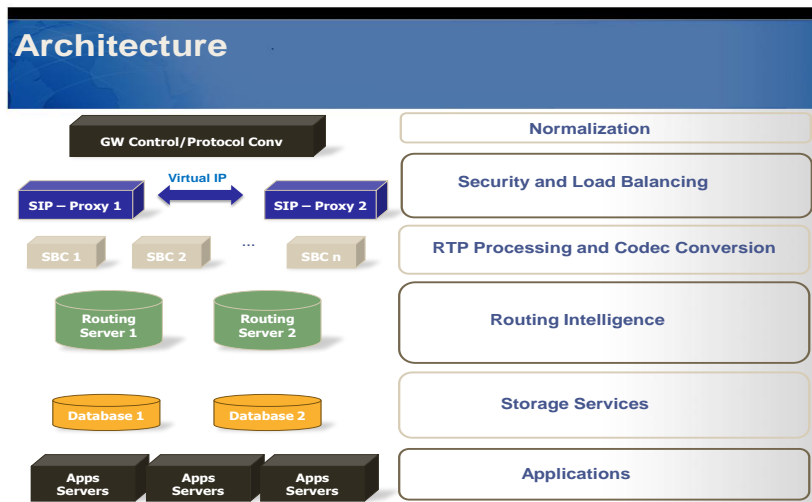The Sky Networks solution includes a wide variety of available features:

Security
• Access Control Firewall
• Topology Hiding
• Session Admission Control
• Denial of Service (DoS) and Distributed DoS Protection
• Call Rate Limiting
• Registration Rate Limiting
• Blacklists and Whitelists

Interoperability and Interworking
• B2BUA
• Firewall/NAT Traversal
• Transcoding (Optional)
• DTMF Translation
• Codec Policing
• T.38 support
• SS7, SIGTRAN Support (Optional)
• MGCP support (Optional)
• RADIUS AAA Support (Optional)
• Digit Matching/Manipulation
• Subscriber Registration Support (Optional)
• H.323 Version 4 with Version 2, 3 Compatibility (Optional)
• Stateful Routing
• Source and Destination Resource Group Support

Architecture

GW Control/Protocol Conv			Normalization
SIP — Proxy 1	Virtual IP	SIP — Proxy 2	Security and Load Balancing
SBC 1	SBC 2 ...	SBC n	RTP Processing and Codec Conversion
Routing Server 1		Routing Server 2	Routing Intelligence
Database 1		Database 2	Storage Services
Apps Servers	Apps Servers	Apps Servers	Applications

Sky Networks solutions are network-ready but can also be easily customized to address specific customer requirements.

VoIP interconnection promotes increased traffic and allows end-to-end services delivery

Sky Networks solutions: superior functionality at a great price

Flexibility
- Configurable Separation of Signaling and Media
- Distributed Clustering Architecture
- Global and Local Dial Plans
- Service Partitioning Based on Customer and Service Type
- Custom Application Triggers Based on Calling, Called, IP and more…
- SS7 and SIP Based Application Access, Interworking and Brokering

SLA Assurance and Call Admission Control
- Admission Control Based on Call Utilization and Capacity
- Routelist Route Advance Determined by Static and Dynamic Parameters
- Pre, Mid and Post Called Number Translation
- Calling Number Screening and Translation
- Call Admission and Blocking
- Comprehensive CDRs
- SNMP trap support
- Radius AAA (Optional)

Reliable and Scalable
SKY Networks solutions are available in a variety of configurations ranging from a single server solution handling up to 2000 sessions to geographically dispersed solutions that span multiple countries and offer global and local route plans and centralized OAM&P and billing. Sky Networks is a world leader in reliability and scalability and offers solutions on a range of hardware.

Service Delivery
Service providers who are looking to further enhance their revenues by adding other popular services to their networks need look no further. Sky Networks solutions allow the easy deployment of exciting services such as residential broadband voice services, hosted PBx and prepaid card services. Our flexible architecture eliminates much of the cost and complexity of adding these popular services.

Customizable
With its flexible and scalable architecture, Sky Networks solutions allow you to minimize risk while meeting the demand for safe, reliable interconnect, mediation and control of your networks. In addition they features open front-end and back-end interfaces based on open API's. This allows them to be easily integrated into other front-end or back end systems and allows new services to be implemented quickly. Sky Networks global professional service and customer service groups provide solution deployment, integration, and round-the-clock support.

Sky Networks
Sky Networks, LLC is a provider of complete VoIP and converged service solutions for telecommunications service providers. By helping its customers connect their world using innovative solutions and backing it with people they can count on, Sky Networks makes deployment easy.