

## The clear breakthrough in networked business telephony



- **Exceptional Voice Quality.**  
Enhanced through proprietary, quality-boosting algorithms
- **Simple Provisioning and Maintenance.**  
The quickest, most straight-forward installation in the industry
- **No single point of failure.**  
Stand-alone functionality with no need for gatekeeper or redundant equipment
- **Fully secure.**  
Unparalleled security through secure remote maintenance, user authentication, and embedded firewall, voice and signaling encryption
- **Fast ROI.**  
Economical deployment, simple streamlined maintenance, and hassle-free use facilitate a quick return on investment and low total cost of ownership

## Overview

BOSâNOVA Gateways create a superior converged voice/data communication network that offers dramatic cost savings and remote connectivity throughout an organization.

Installed in each company location, the BOSâNOVA Gateway bridges the existing telephony system (PBX or regular telephones) with the resident data network. Phone and fax calls are digitized and compressed into packets for integrated transport with data, and transmitted to sister BOSâNOVA Gateways at enterprise locations over the company's TCP/IP network (Internet or Intranet/VPN). Routed over the resident IP network rather than the traditional PSTN, gateway-to-gateway calls are free — without compromising call quality.

BOSâNOVA V-Series (Vintage) Gateways are available in 1U-19" rack mount E1/T1 PRI, FXS, and FXO configurations and provide a supplemental telephony solution to the resident telephony network. All units have numbering plan support compatible with BOSâNOVA Claro Gateways and the BOSâNOVA Connect. V-Series Gateways are interoperable with H.323-compliant third-party solutions — including gatekeepers — as well as SIP-supported devices.

## Features

### Outstanding Voice Quality

BOSâNOVA Gateways are renowned for delivery of consistently high voice quality connections, even over the

public Internet. While the Gateways support all standard high fidelity speech compression algorithms, they enhance quality by employing techniques that prioritize voice over data, cancel echo, and eliminate delays. QoS is boosted by such features as a dynamic, adaptive jitter buffer and alternative IP-routing.

### Easy, Centralized Remote Management

BOSâNOVA Gateways enable secure remote administration from any PC — browser-based, or wizard-controlled — via any method of Internet connection, including remote modem dial-up.

The BOSâNOVA Gateway Configurator enables simple and remote gateway administration using Microsoft's Internet Explorer and Microsoft JVM (Java Virtual Machine). The Configurator includes, among other tools, a Gateway Monitor that provides port status CDRs (Call Detail Records) with Mean Opinion Score (MOS)-like information; a unique Disconnect Signal Analyzer for easy FXO-PBX integration that falls outside the automated path; and a Numbering Plan Configuration Wizard for unparalleled simplification of gateway set up.

The BOSâNOVA VoIP Maintenance Wizard is a remote monitoring and control system, simplifying both the installation and maintenance of the gateways, allowing easy localization and identification of problems. The gateways can be monitored remotely yet securely, enabling upload

## BOSâNOVA® V-Series IP Telephony Gateways

of new versions, version maintenance, traces, and collection and analysis of statistics regarding gateway operation and calls/network quality.

### Feature-rich Monitoring

BOSâNOVA Gateways maintain a log of errors and activities and provide an extensive CDR at the end of every call. This record includes statistical information about the call quality, in addition to the standard data, such as who called whom and length of conversation. CDRs can be easily sent to a CDR server, parsed into separate records, and inserted into a database. Call statistics can be analyzed using third-party applications or through user-defined Excel reports generated by the BOSâNOVA CDR Report Generator. CDRs are viewable in real time via a browser through the Gateway Monitor. CDRs may also be viewed on the BOSâNOVA simple network management protocol (SNMP) Manager, which allows easy centralized monitoring of BOSâNOVA Gateway network activity and supports external SNMP Managers such as HP OpenView.



Call ID	Call Time	Call Duration	Call Status	Call Type	Call Party	Call Number	Call Length	Call Cost	Call Quality	Call Notes
00000001	14:11:06	0:00:00	Success	Local	00000001	00000001	0:00:00	0.00	100	
00000002	14:11:07	0:00:00	Success	Local	00000002	00000002	0:00:00	0.00	100	
00000003	14:11:08	0:00:00	Success	Local	00000003	00000003	0:00:00	0.00	100	
00000004	14:11:09	0:00:00	Success	Local	00000004	00000004	0:00:00	0.00	100	
00000005	14:11:10	0:00:00	Success	Local	00000005	00000005	0:00:00	0.00	100	
00000006	14:11:11	0:00:00	Success	Local	00000006	00000006	0:00:00	0.00	100	
00000007	14:11:12	0:00:00	Success	Local	00000007	00000007	0:00:00	0.00	100	
00000008	14:11:13	0:00:00	Success	Local	00000008	00000008	0:00:00	0.00	100	
00000009	14:11:14	0:00:00	Success	Local	00000009	00000009	0:00:00	0.00	100	
00000010	14:11:15	0:00:00	Success	Local	00000010	00000010	0:00:00	0.00	100	

The CDR Viewer of the Gateway Configurator provides a real-time snapshot of a gateway's call activity

### Super Flexible, Intuitive Numbering Plan

Setting up the phone number logic in BOSâNOVA Gateways is totally intuitive and familiar — anyone who has ever dialed a phone number can configure the system. And, with the provision of short cuts on the corporate level and rule based numbering management (RBNM) on the gateway level down to each port, it's flexible enough to accommodate every dialing plan.

BOSâNOVA Gateways provide support of private, public, and abbreviated dialing plans, and allow configuration on the port level. The numbering plan is consistent with the international PSTN E.164 standard, with automatic appending and stripping of digits to numbers dialed transparent to the caller, so that placing a call over IP is no different than placing a call over the PSTN.

### Stand-alone Functionality

An "Officer Gateway" is designated for initiating new gateways and automatically distributing updated dialing tables, eliminating tedious back-up work and reinforcing network robustness. Since BOSâNOVA Gateways are innately radically egalitarian — every gateway is always updated with the same network information — if the need arises, any one gateway can take over the officer function. This gives the network administrator flexibility and control not found in IP telephony systems reliant on stand-alone gatekeepers.

Because updated dialing tables are distributed, address translation is performed inherently by each gateway. This architecture eliminates the need for an external gatekeeper, speeds up call establishment, dramatically reduces network maintenance requirements, and improves network robustness by eliminating a single point of failure.

### Total, Absolute, Unsurpassed Security

BOSâNOVA Gateways are distinguished by their provision of multiple protection levels for unsurpassed security: SSH™ (Secure Shell) server software to provide secure remote management by encrypting information that flows to and from the gateway; our built-in authentication functionality that screens on both the gateway and caller level; and an embedded firewall with multi-level access options. Only BOSâNOVA Gateways offer three-tier security protection against unauthorized access. As well, the gateways uniquely offer a voice and signaling encryption option for the BOSâNOVA network.

### Fast Return on Investment

Leveraging the existing hardware infrastructure, BOSâNOVA Gateways are universally integrable with any PBX equipment, regardless of manufacturer. Substantial savings are realized not only from intra-company calls made at no charge over existing IP networks, but from "off-net" calls as well, that are first routed over IP before "hopping off" to the PSTN. With no hidden installation or maintenance costs, no down time, and no user learning curve, ROI takes a matter of months, not years.

IP TELEPHONY  
Clear & Simple

BOSâNOVA