

MITEL NETWORKS

3300 | IP Networking Gateway

Simple, Cost-Effective Solution Converged VoIP Solution

For businesses currently using multiple legacy private branch exchanges (PBX), the Mitel Networks 3300 Integrated Communications Platform (ICP) can provide an IP networking gateway to carry voice over the existing data network.

This application note describes the solution, its benefits and configuration requirements.

Application Scenario

Where an enterprise has separate voice and data infrastructures, the complexity and cost of maintaining and supporting both can become excessive.

Many enterprises in this situation are today looking for ways to:

- Simplify the management of multiple networks
- Leverage their investment in the existing data infrastructure
- Reduce the high recurring costs of voice T1 connectivity

Mitel Networks Solution

The Mitel Networks 3300 ICP or 3340 Branch Office Solution can be deployed to integrate disparate voice and data networks over a converged IP network in this way:

- 3300 ICPs are connected to existing Mitel Networks or third-party PBXs.
- IP networking with G.729 compression is used to transmit voice calls over the LAN/WAN data infrastructure, between PBXs.

Benefits

The Mitel Networks 3300 IP Networking Gateway offers enterprises the following immediate benefits:

- Leverages existing data network investment: voice traffic runs over data infrastructure
- Simplifies maintenance and support of communication infrastructure: potential to re-deploy staff and save money
- Reduces the need for costly point-to-point voice T1 connections
- Branch offices and teleworkers can be easily setup with a 3300 ICP or 3340 Branch Office Solution.
- **Intelligent Evolution** — The 3300 ICP is a full-featured IP-PBX, so the business can take advantage of IP phones and applications as it requires. The business can easily set-up teleworkers or branch offices using the 3300 ICP or 3340 Branch Office Solution.



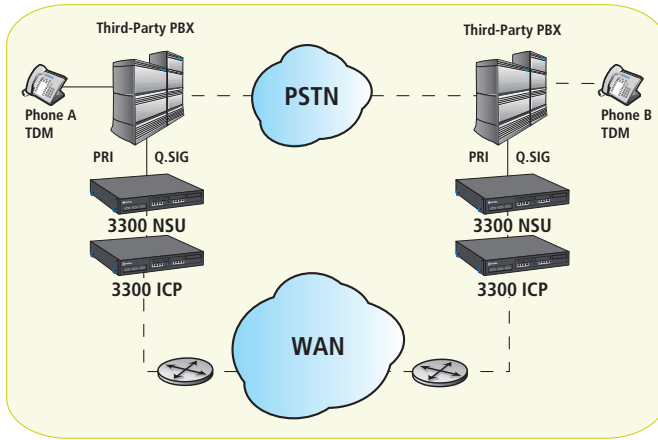
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Configuration and Specifications

The diagram below illustrates a sample configuration for the 3300 IP Networking Gateway application.

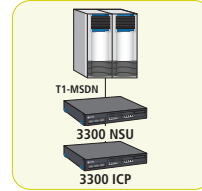
3300 IP Networking Gateway

Figure 1

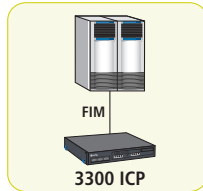


Mitel Networks 3300 ICPs can also be connected to SX-2000® LIGHT, SX-2000 MicroLIGHT and SX-200 EL PBXs as shown in figure 1.

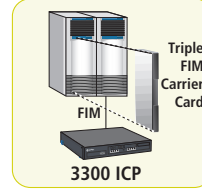
SX-2000 LIGHT/MicroLIGHT



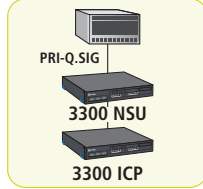
SX-2000 LIGHT



SX-2000 MicroLIGHT



SX-200 EL



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Connectivity Options

FIM - 3300 ICP provides full call control to SX-2000 LIGHT/MicroLIGHT Peripherals
 T1 MSDN - 3300 ICP Supports full feature transparency to SX-2000 LIGHT/MicroLIGHT
 PRI Q.SIG - 3300 ICP provides rich feature transparency (see table) to SX-200 EL and third-party PBXs

Connectivity to 3300	SX-2000 LIGHT/MicroLIGHT	SX-200 EL	Third Party PBX
FIM	Yes	No	No
T1 MSDN	Yes	No	No
PRI Q.SIG	NA	Yes	Yes

Q.SIG Feature Support ¹

Standard	Feature	Supported on the SX-2000/3300
ETS 300 012 (Ed 1)	Layer 1	Yes
ETS 300 402-1&2	Layer 2	Yes
ISO 11574, 11572	Audio Speech	Yes
ISO 11571	Numbering Plan	Yes
ISO 11582	Generic SS Platform (GF)	Yes
ISO 14136	Calling Line Identification Presentation (CLIP)	Yes
ISO 14136	Connected Line Identification Presentation (COLP)	Yes
ISO 14136	CLIP/COLP Restriction (CLIR)	Yes
ISO 13864, 13868	Calling Name Identification Presentation (CNIP)	Yes
ISO 13864, 13868	Connected Name Identification Presentation (CONP)	Yes
ISO 13864, 13868	CNIP/CONP Restriction (CNIR)	Yes
ISO 13872, 13873	Call Forwarding Unconditional (CFU), Busy (CFB), No Reply (CFNR)	Yes
ISO 13872, 13873	Call Deflection	Yes
ISO 14841, 14843	Call Offer (CO)	Yes
ISO 13865, 13869	Call Transfer (CT)	Yes ²
ISO 13863, 13874	Path Replacement (PR)	Yes
ISO 15505, 15506	Message Waiting Indication (MWI)	Yes
ISO 15505, 15506	Transit Count (TC)	Yes

¹ Q.SIG is an open industry standard, but individual vendor implementations may vary. Resellers should verify Q.SIG feature support on non-Mitel Networks PBXs.
² Please see Mitel Networks' Q.SIG Set-up and Programming (SX-2000/SX-200EL) Technical Service Bulletin.

3300 IP Networking Gateway Parts List (with 24 channels of compression)

MSDN/Q.SIG Integration			FIM Integration		
Part Number	Description	Quantity	Part Number	Description	Quantity
50002970	3300 Universal Controller (250 Users)	1	50002970	3300 250 Controller	1
50001270	Universal NSU	1	50002974	3300 System Software	1
50002974	3300 Release 3.2 System Software	1	54000540	IP Networking License	1
54000303	Network Link License	1	50001856	Triple FIM Card*	1
50002979	Quad DSP	1	50002979	Quad DSP	1
50000650	Compression License (8 pack)	3	54000650	Compression License (8 pack)	3

* Required only for SX-2000 MicroLIGHT

For details or to purchase, please contact your Mitel Networks Solution Provider, or go online to www.mitel.com to be connected to a Solution Provider.

www.mitel.com



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