Telecom Service Access Controllers



The superb ISDN Basic Rate Least Cost Routers



The Parlay routers from Partner Voxtream are the optimum solution for competitive carriers and service providers, who want to offer customers fully automated and remotely managed dial-in or switching to their network and services.

Experience counts

Partner Voxtream, the first manufacturer to provide the European market with ISDN least cost routers, offers a complete »package« consisting of:

- top reliable and competitive products
- an efficient and comprehensive router management system
- qualified and fast support of carriers and installers
- years of experience of interconnection with PBX systems of all brands and versions
- years of experience of interconnection with ISDN networks in many countries

This makes Parlay routers the markets best choice.

The Products

The Parlay LCR i2i, i4i and i8i CD routers are reliable and flexible ISDN Basic Rate Access (ISDN2) least cost routers. A Parlay router is easily plugged in between the PBX and the ISDN Network Terminal (NT) of a customer. The router analyses

all dialled numbers before they are submitted to the ISDN network, it adds digits and call sequences or selects a line as required. The comprehensive routing table determines the routing of calls, based on destination, type of service (data / voice), time of day and day of week.

The Parlay CD routers support all ISDN services. Programming and table updating are typically carried out remotely from the management centre.

Parlay based Service Offerings

Relying on Parlay routers, competitive carriers and service providers are able to:

- automatically route outbound customer calls through their network
- provide customers with sophisticated value added features
- manage routing parameters and router settings remotely
- monitor and analyse customer call activity

Besides the advanced routing features, the Parlay routers offer value added features like

- true tariff advice of charge to customers
- call details logging (to be used for billing etc.) and call statistics

Customers cut their phone costs and make use of network value

added services without having to change calling behaviour.

Here are some classical examples of Parlay based services:

Two-stage dial-in

This procedure is used for e.g. call back and access to VoIP services, when the customer is connected via lines of the incumbent carrier only.

- The customer calls a number, typically an international number, which preferably is routed via the service provider.
- 2. Based on call analysis the
 - calls a local or national service number of the preferred service provider
 - 2) dials the PIN code that identifying the customer
 - dials the number the customer is dialling or has dialled
 - 4) connects the customer on B-answer



The whole sequence is done in a few seconds, while the customer is dialling the requested number.





Parlay LCR i2i, i4i, i8i CD – The feature rich ISDN BRA Least Cost Routers

Single stage call set-up

This procedure is used for automating carrier call-by-call selection, when the customer is connected via lines of the incumbent carrier only.

- The customer calls a number, which is to be routed via the service provider.
- **2.** Based on call analysis the router:
 - 1) inserts the carrier selection code of the preferred service provider
 - 2) connects the customer

Service selection by physical

This procedure is used for automating carrier selection, when the customer routes e.g. corporate calls via a VoIP service. Alternatively one line could be connected to a GSM gateway. The router provides Y-splitting of PBX ISDN BRA interfaces into two physically separated ISDN BRA lines*).

 The customer calls a number or uses a specific service (voice/data)

- 2. Based on call analysis the router:
 - 1) selects the line for the preferred service
 - 2) connects the customer
- *) This is an option for Parlay i4i and i8i CD only.





Parlay CD Key Features

Feature	Benefit
Analysis of outgoing calls and routing to alternative carriers	- Competitive carrier / provider (CC): Profitable calls are routed via CC's
	network.
	Customer: Low tariff calls
DTMF and tone receiver	Two stage dial-in is supported
Re-routing in case of busy network etc.	No service disruption if CC's network is overloaded etc.
»Bridging« in case of power down	No call blocking in case of disrupted power supply
Transparent connection of incoming calls	Existing service level for incoming calls is maintained
Supports all ISDN services	The customer is able to use features like presentation of calling
	number, call forwarding etc.
Detailed advice of charge information, adapted to actual call routing	Customers requiring call charge information (e.g. hotels) continue
	to have this service when shifting to CC
Detailed logging of in- and outgoing calls	Call detail records available for billing, statistics, traffic load and
	customer service evaluation
»Call-home« function for automatic routing table maintenance	Routing tables are regularly updated. Absence of call-home
	identifies a malfunctioning router
Manual activation of »call home« is possible	Reduces router installation to a matter of plug-in only
D-channel protocol analyser (onsite and remote)	Quick and efficient trouble shooting on all OSI layers
LED router status display	Quick visual indication of router status
Passwords and calling number verification for remote access	Hostile access to the router is prevented
Universal, energy-saving power supply is built in	No disruption in case of power drops, router runs on 85 to 265 Volts.
	Environment-friendly low power consumption of less than 7 VA.
European and country-specific approvals	No delay in deployment, all relevant ISDN EMC and safety are fulfilled.
Auto-adaption to ISDN line protocol	Installation is reduced to a matter of plug-and-play.
Multiple carrier types supported	Allow universal service offerings (single stage, two stage, callback,
	pure voice and pure data services)

Reservations are made for adjustments of specifications and printing errors.

Partner Voxtream Ltd. was established in 1988. In the early days the main activity of Partner Voxtream was development of small and medium-sized PBX systems. Today these systems are distributed in Denmark by Tele Danmark. In the early 90'ies Partner Voxtream developed ISDN based products like terminal adapters. In 1995 the Worlds first ISDN least cost router was developed by Partner Voxtream, just in time for the European telecom liberalisation. 40% of the highly qualified people working in Partner Voxtream are in the R&D departments in Vojens and Aalborg, Denmark. Sales and support offices have been established in France, Germany, Spain and Italy. In 2001 Partner Voxtream launched new and very competitive digital PBX systems designed for the international market. Partner Voxtream is preparing to launch advanced VoIP based products for business DSL access, and ADSL-based telework voice and data applications. Remote management systems for all products are provided.

