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PBX on eComStation

... presentation starts now ...

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PBX on eComStation



Overview

- **Introduction**
 - WS IT-Service
 - Logic Consult GmbH
- **PBX-History of**
 - WS IT-Service
 - Logic Consult GmbH
- **History & Development of an PBX running eComStation**
- **Current Features**
- **Hardware-Architecture**
- **Software-Architecture**
- **Demo**
- **Outlook (coming Features, planned Features, Service Offerings)**
- **Questions**

Introduction

WS IT-Service

- start of business in 1988
- engineering of Hard- and Software
- development of OS/2-Software e.g. PTime/2, DirDiff, LogView
- development of PM-Controls e.g. asCal, asMb, asList, asGrap

Logic Consult GmbH

- established in 1987
- grown out of projects for american Banks
- development of solutions for banking-, insurance- and advertising-industry-customers
- teamwork with IBM on OS/2-Presentations and Speeches in Europe, USA and Asia
- development of the certification program and workshops for OS/2-Client and Server
- projects and presentations for different IBM-Brands on Business Partner Events and Fairs
- today almost 20 years of experience in IT-projects and project-management
- customers IBM, Deutsche Bank, Helvetia, Sun, Intel, Lufthansa, Telekom, Olympus etc.

PBX-History of

WS IT-Service

- administration for PBX-Customers
- subsequently disappointed by the products offered by the market
- therefore decision for an own PBX-system and based on that the design of specifications of a new PBX-approach from the scratch in co-operation with Logic Consult GmbH

Logic Consult GmbH

- new Office-Building finished in 1997
- need for a new, more powerful PBX
- research and development of spec-sheets for PBXs
- start of projects and development based on MIX Pegasus
- contact to WS IT-Services
- co-operation with WS IT in defining the design of a completely new PBX based on the Logic Consult-approach

History & Development of an PBX running eComStation

- poor performance of an long awaited PBX offered by a leading vendor
- development of asTeli V1/V2
 - decision for OS/2 as the Operating System
 - based on two ISDN-Cards (ELSA)
 - debugging to understand the working of provided drivers
 - realizing of some services in hardware
- conclusion, that the new PBX has to be realized using special Telco-ICs
- inquiry of available ICs and other essential modules
- learning of the specs for Bus-systems (IOM-2, IOM-2000) and PCI-Hard-/Software
- initial building of prototypes with test-drivers, -programs, logic-analyzers, oscilloscope
- determination of hardware and modules to be used
- beginning of programming e.g. protocol-software, drivers, applications and Layer 2/3
- definition of hard-/software-architecture and features together with Logic Consult
- Logic Consult will offer additional services and productivity software based on the programmig interface

Current Features 1/3

- all ISDN-Features
- up to 24 S0-Ports plus up to 32 analog-Ports
- 'Door-Lines' for every analog-Port
- all S0-Ports can be defined to work internally or externally
- configuration and administration via LAN
- open TCP/IP-based programming-interface
 - extended services and features available via Logic Consult GmbH
- Remote Control via Webbrowser
- Logging of all generated data, supported by a filter-application incl. D-channel-analyzing
- offers gateway-features due to the OS/2-based-architecture
- variable and different length of extension numbers
- Music-On-Hold with announcements

Current Features 2/3

- separate Mailbox and Answering Machine for every extension
- Taping of telephone calls
- LCR and LCR with Fallback
- Call Back
- Suppressing and/or handling of specified Caller-IDs
- Busy on Busy
- Reject on Reject
- Pickup
- Telephone Conference
- Announcements for special Events
- Holiday-Map for settings
- Suppressing of Inband-Information

Current Features 3/3

- PPP
- IP-configuration via Telefon
- Regular Expressions
- *plus a few in german, since we don't have slightest clue how it's called in english: ;-)*
- Besondere Amtsholung
- Entreissen
- Aufschalten
- AB entreissen

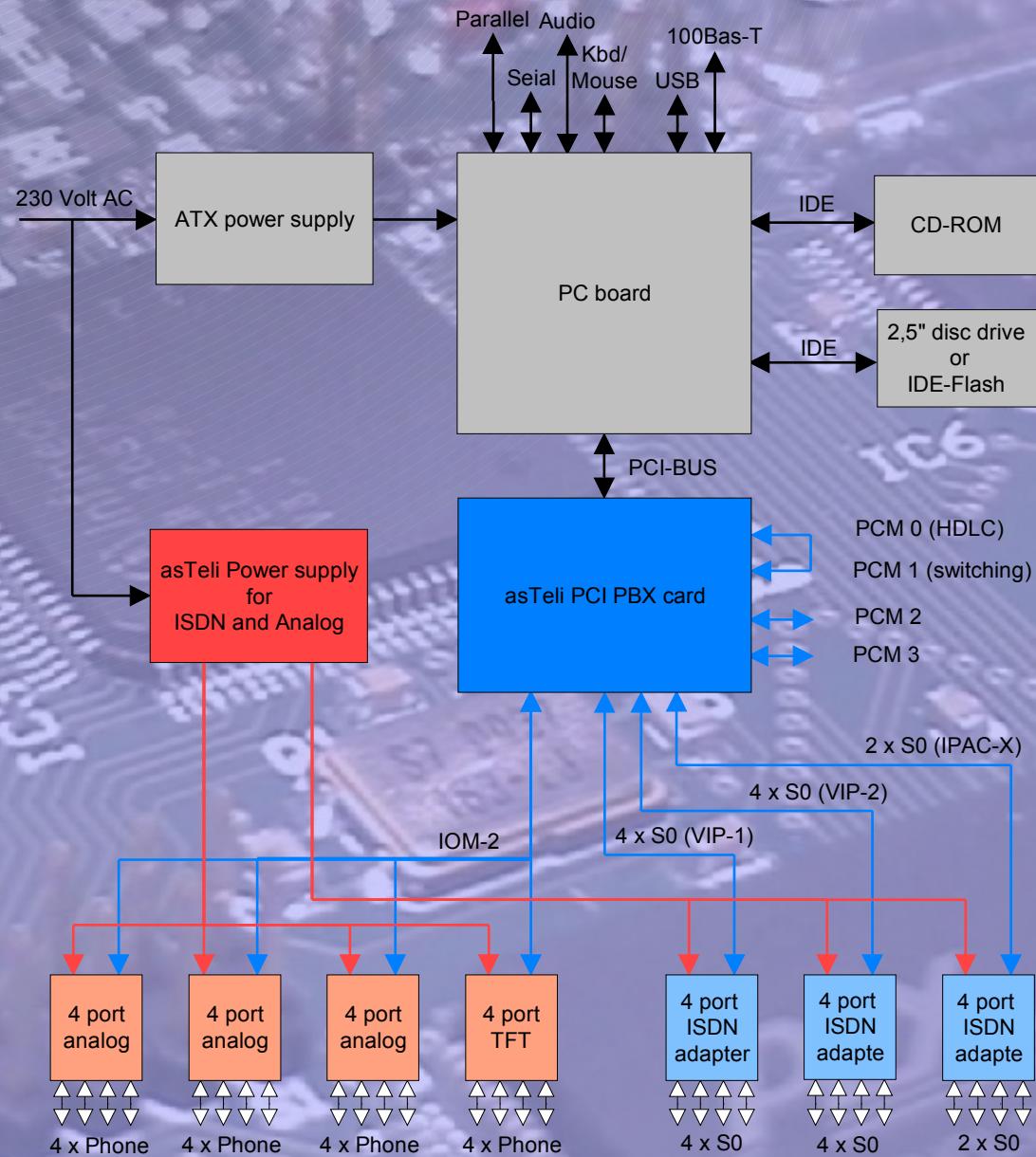
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Hardware- Architecture

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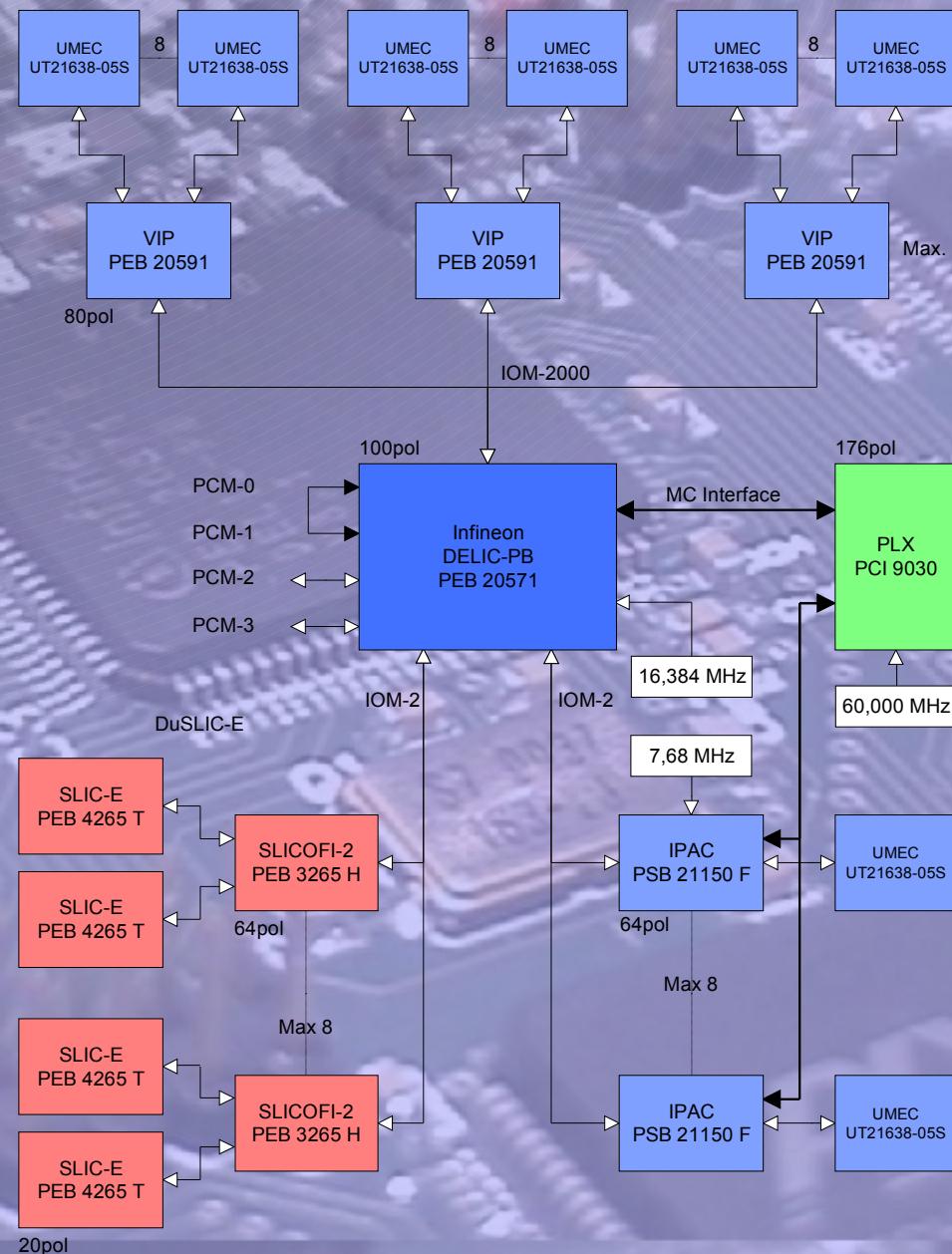
Overview asTeli hardware



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Übersicht asTeli PCI-BUS Karte



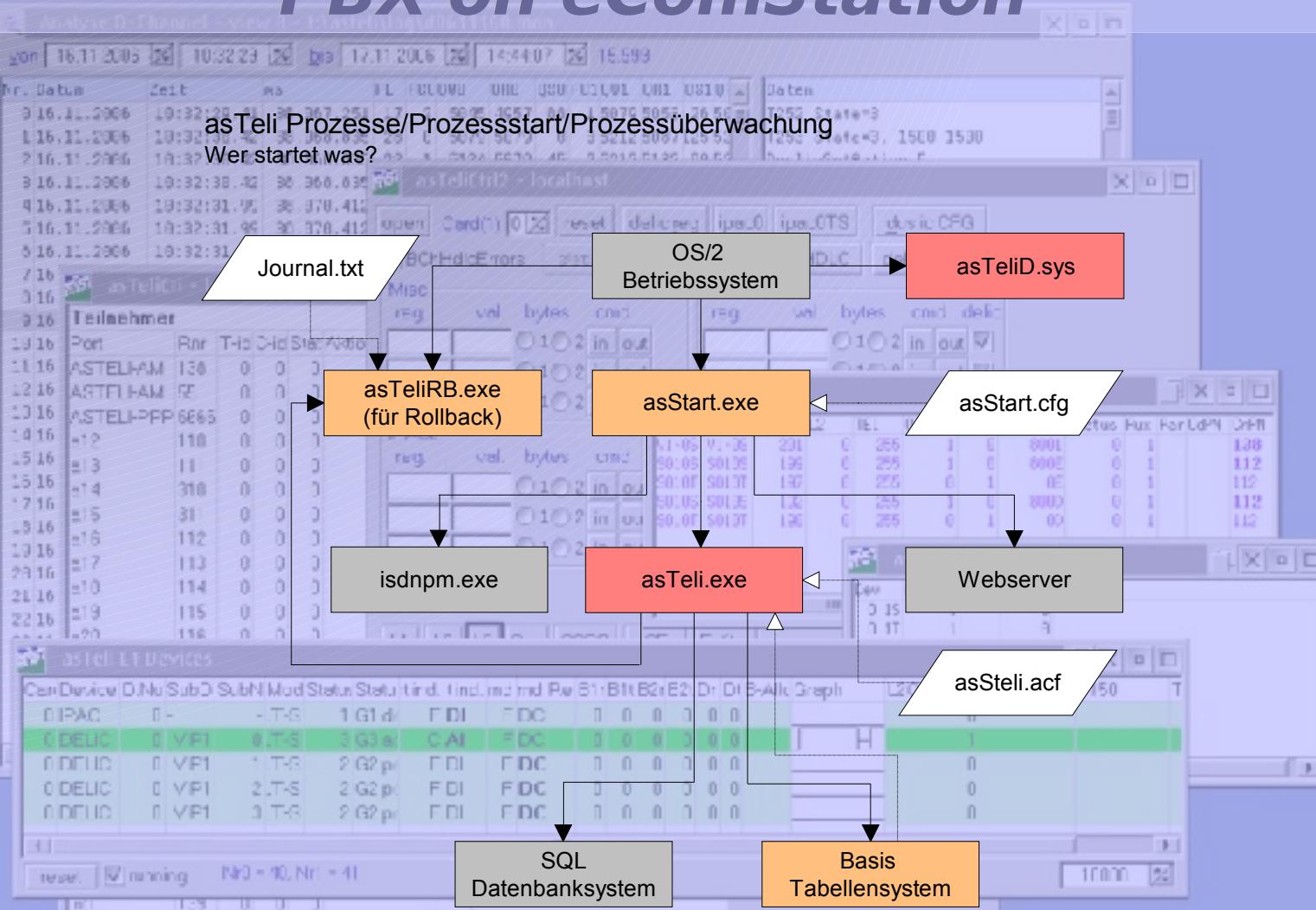
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Software- Architecture

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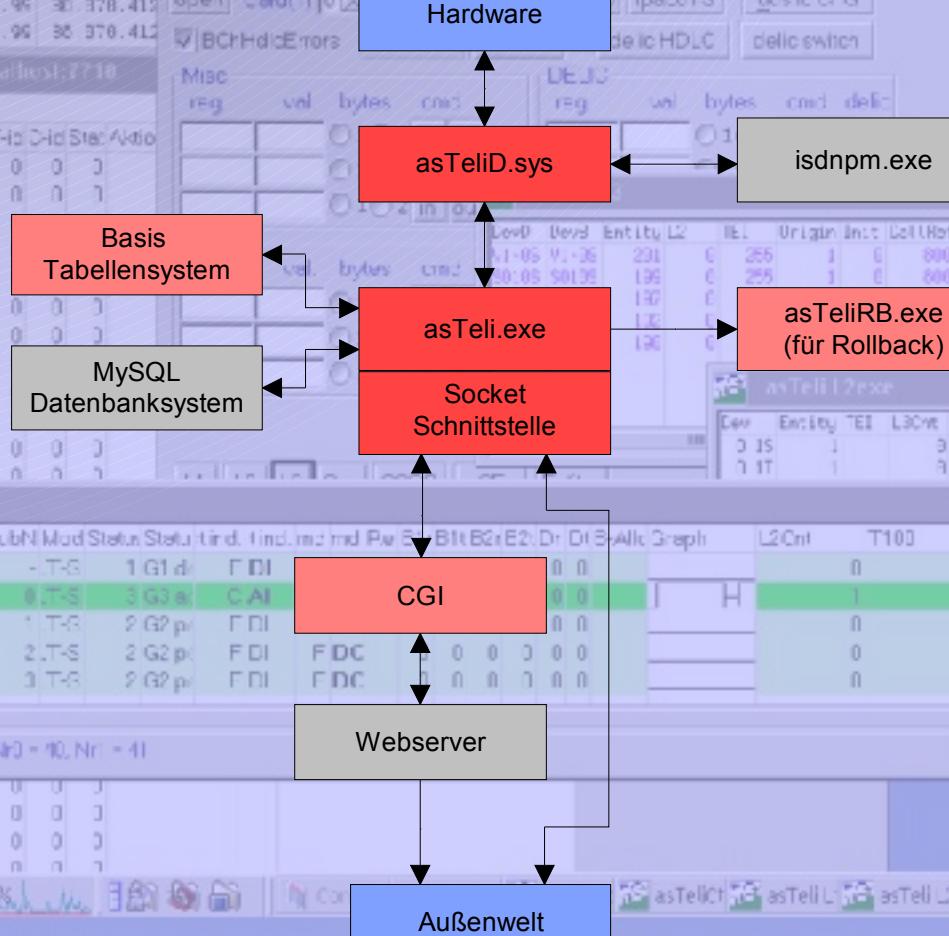
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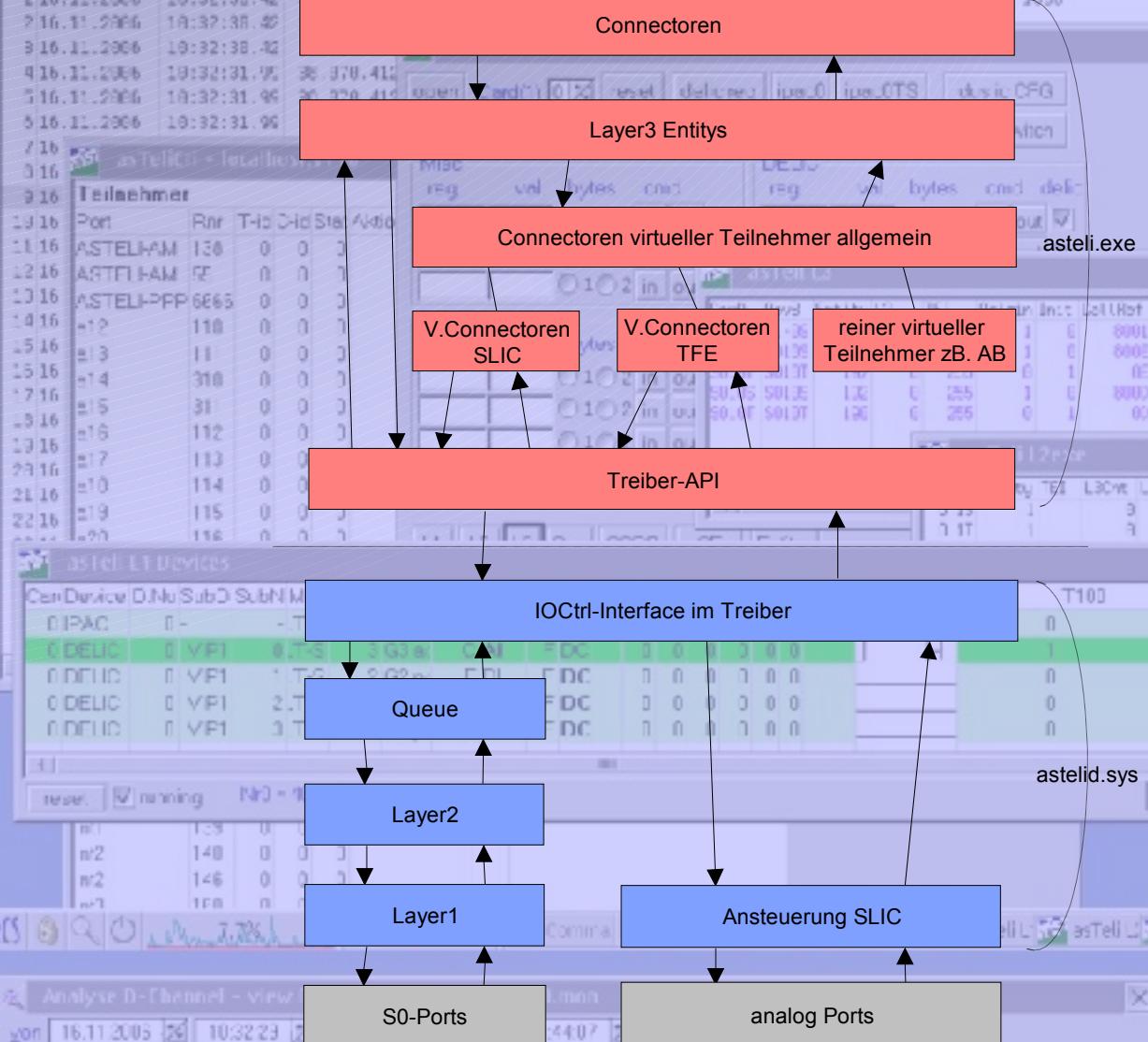
asTeli Interaktion zwischen Modulen



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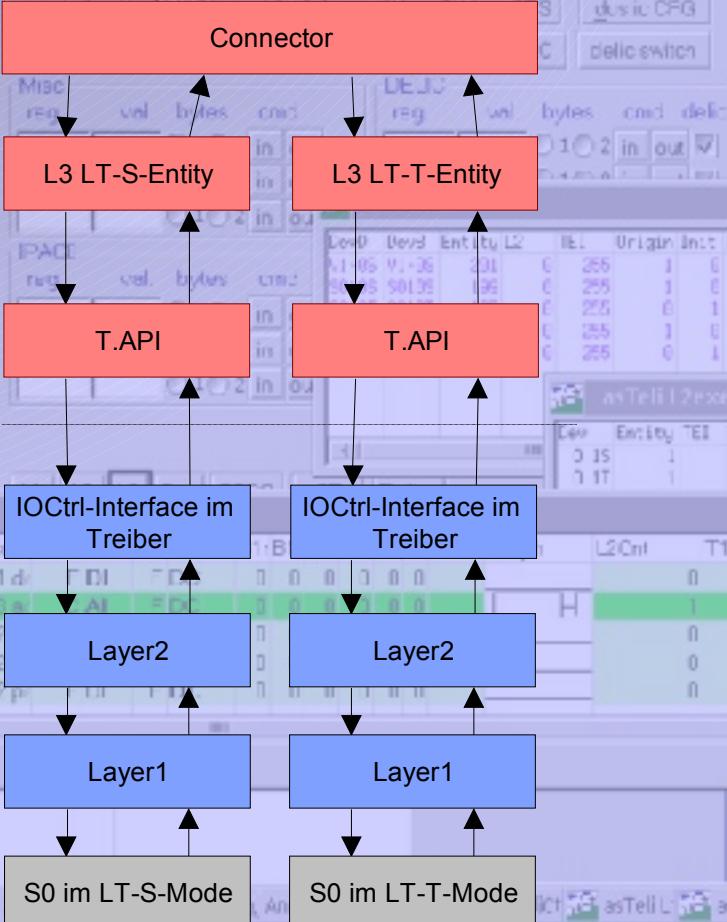
Übersicht asTeli Protokoll-Software



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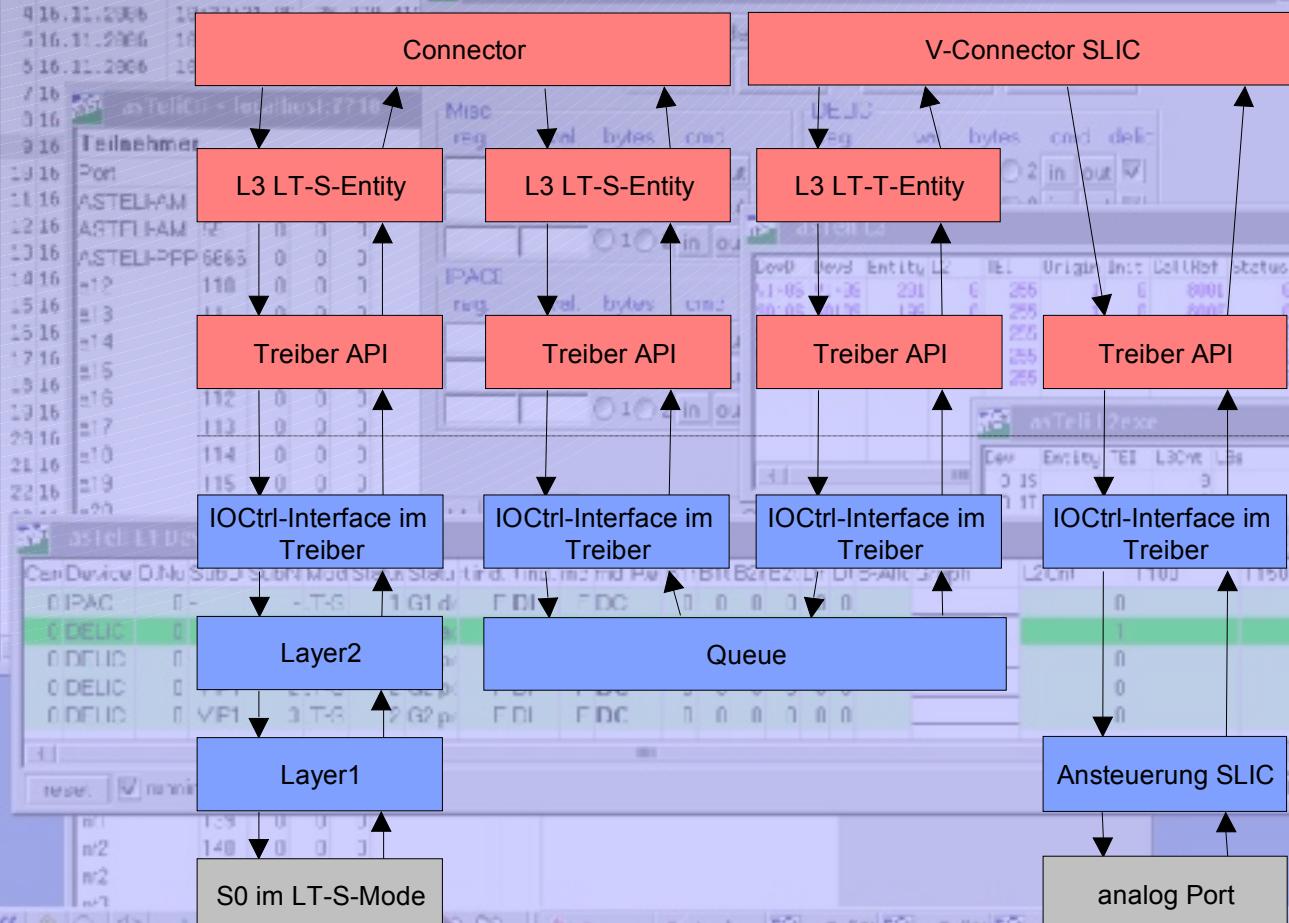
Signalfluß zwischen internem und externem S0



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Signalfluss der Steuerung zwischen internem S0 und Analog



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Demo

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Outlook

Coming Features

- Emergency-Mode for ISDN- and analog-Ports
- Actors / Sensors
- Multiple-Port-Cards for direct connections to the Telco-Provider
- S2M-Interface
- Central Phonebook

Planned Features

- VOIP-Integration
- Waiting-Loop for Call Centers
- Fax-Server-Funcionalities
- central administration of contact-data via SQL- or LDAP-Server
- Router-Functionality with external DSL-Modem
- E-Mail-forward for system events, missed calls, alarms etc.
- Voice Mail
- Power Supply via 12V AC
- UPS

Service Offerings & Productivity-Software

- via Logic Consult GmbH

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Questions

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