

# TL410

## ProVision V2.5

### Tellitec IP Software Family



#### Description

ProVision is a unique subscriber and service management solution for the Tellitec traffic enhancement (TelliNet) and traffic shaping (TelliShape) software solutions. ProVision is designed to control and to automate many of the complex tasks of an Internet Service Provider (ISP) via an easy to use web front-end.

As corporate and private users demand more and more bandwidth service providers need to apply sophisticated traffic policing and shaping mechanisms in order to ensure that the available bandwidth is distributed in the most appropriate manner among the active users. ProVision helps providers to grant users the quality of service they have paid for and at the same time to limit the bandwidth to users who do not obey the agreed fair-use policies.

The flexibility of ProVision's fair-use policy engine is based on the combination of a sophisticated set of triggers and the associated actions to avoid that a small group of power users cannibalizes the overall bandwidth and thus harms the service experience of fair users.

ProVision offers a comprehensive three-tier approach, by differentiating between operator, service provider and subscriber functions.

- The first layer is the high-level view of the service operator giving him the capability to monitor the used TelliNet and TelliShape (optional) servers and to manage the overall service and the available bandwidth.
- In the second layer a service provider has the possibility to manage his own subscriber base and optionally define his own rates and fair-use mechanisms. This gives the service provider full flexibility and control over the service he sells.
- The third layer is dedicated to the subscriber, providing them with service information, e.g. download statistics and status information on the quality of service (QoS). The subscriber can perform certain self-administration functions in this view that can considerably reduce the work load of the service provider's helpdesk.

All data of ProVision is stored in a database giving the service operator and the service provider full freedom in applying his preferred business model. No matter if the users pay a flat fee per month or a fee per MByte, via an open interface it is possible to interchange data with existing billing and ERP systems to keep accounting, invoicing and forecasting processes under control.

The ProVision system itself fits perfectly into the Tellitec IP software infrastructure and takes control over existing TelliNet or TelliShape servers. No further service administration efforts are needed on these servers because the service and subscriber management will be controlled by ProVision.

#### Key Features

- Three-tier management
- Web based administration for all tiers
- Sophisticated fair-use policy engine
- Resources can be assigned to single ISPs
- Accounting and monitoring
- Configurable QoS levels
- Streamlined "one-step" subscriber setup for optimized end-user and subscription management
- Self administration and service information for end-users
- Supporting XML import and export

#### Main Advantages

- Based on proven algorithms and methodologies used for B2C cable networks with special adjustments for satellite usage
- Optimized for Tellitec IP Solutions, using best practices to operate TelliNet and TelliShape in an efficient way
- Aggregation of bandwidth consumption to bill customers and service providers by their actual usage
- Supports tailor-made subscription profiles
- Automated fair-use policy engine based on user behavior
- Easy customization of web interfaces for all three tiers
- Easy to expand by new functionalities
- Easy to integrate into existing IT infrastructure

#### Applications

- One-way and two way satellite Internet broadband services
- VSAT services

#### Related Products

**TL100 TelliNet:** IP traffic enhancement software solution consisting of unmatched performance enhancement features to allow efficient Internet services via satellite and mobile networks.

**TL200 TelliShape:** Unique multilevel IP traffic policing, prioritization and real time shaping software solution for shared networks.



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# Specifications - TL410

## System Architecture

- Web based interface
- Operating in combination with TelliNet and TelliShape (optional)
- Supports separate user interface and administration login

## Operator System Requirements\*

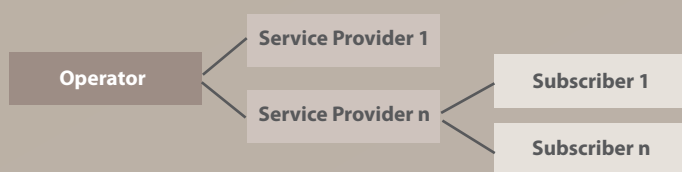
- Existing TelliNet and TelliShape (optional) server
- Linux (Debian Linux Kernel 2.6)\*\*
- MySQL 5.x\*\*
- PHP scripting language 5.x\*\*
- Apache2 web server
- Web browser (e.g. IE, Netscape, Opera)

## Service-Provider / Subscriber System Requirements\*

- Web browser (e.g. IE, Netscape, Opera)

## Three-Tier Support

- ProVision features a three-tier view on the system



## Service Management

- Definition of service packages by an extended set of pre-defined attributes e.g. peak information rate (PIR), committed information rate (CIR), receive rate, fair-use policy, costs
- Service package profiles can be specified by the operator (tier 1) and/or by a service provider (tier 2)
- Operators can predefine service packages to be resold by the service providers

Example of the parameters for a service package:

name	send rate (peak)	send rate (CIR)	customer rate
bronze	262140	262140	<b>limits:</b> peak: 262140 bit/s CIR: 262140 bit/s <b>ratebehavior:</b> Bandwidth @ 196610 bit/s (limit: 500.00 MB) Bandwidth @ 131070 bit/s (limit: 1000.00 MB) Bandwidth @ 98304 bit/s (limit: 1500.00 MB) Bandwidth @ 65536 bit/s (limit: 2000.00 MB) Bandwidth @ 32768 bit/s (limit: 2500.00 MB) <b>modify existing ratebehavior</b>

## Subscriber Management

- Administration of subscribers according to specific profiles defined by the operator or the service provider
- Automated scheduling of start and end dates for subscriptions
- Automatic generation of login name and password

## Fair-Use Policy

- Definition of user behaviors triggering an associated action, e.g. reaching a monthly download volume of 1 GByte reduces the download rate of the user from 768 to 512 kbit/s
- Supports e-mail notification of subscribers
- Combination of different actions, e.g. e-mail notification combined with a reduction of the download rate
- Automatic logging of fair-use policy enforcement actions for the helpdesk

## TelliShape Support

- Supports group hierarchies enforced by TelliShape
- TelliShape provides multilevel traffic shaping and prioritization capabilities and is required for the implementation of the ProVision fair-use policy mechanism



## Accounting

- Data aggregation at subscriber level
- Monthly scope for fair-use and QoS management based on an individual start day per subscriber to avoid congestion

## Reliability / Scalability

- Monitoring of network failures and other system critical incidents
- Notification via e-mail (active) and via a message board to be shown on the operator's front-end (passive)
- Web and database functions can be distributed over multiple machines

## XML Support (Optional)

- Import and export of XML files
- XML import for external subscriber management
- XML export for accounting and billing information

## Management

- ASCII based configuration files
- Web-based interfaces for all tiers
- Supports creation of additional database fields

## Customization For Service Providers

- Do-it-yourself customization of service provider and subscriber web interface
- Customizable through e.g. adaptation of logos, font-sizes, colors, content

## Ordering Number

ProVision

TL-410 LIN

Please note: ProVision consists of a base software license and a subscriber license, which is dependent on the number of supported subscribers.

\* The required TelliNet/TelliShape, MySQL, or any other software licenses are not included in ProVision and need to be purchased separately

\*\* Others on request

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