Backbone

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General

The YellowFox platform is built to meet the special requirements in such a AVL environment:

YellowFox is using special hardware and software to meet special requirements. This hardware is mostly built to order, to provide the best possible performance for the certain task. This makes YellowFox nearly independent from maintenance tasks, software bugs or broken hardware. if there is an outage, only the function of that particular "island" is affected. We understand this to be the most important difference to classic client/server designs. The used hardware is therefore exchangeable, to . make YellowFox independent from a specific hardware provider. And it is the same for the software in the backbone. This is in our opinion the only way to provide a high performance, high reliability, low cost service environment to our customers.
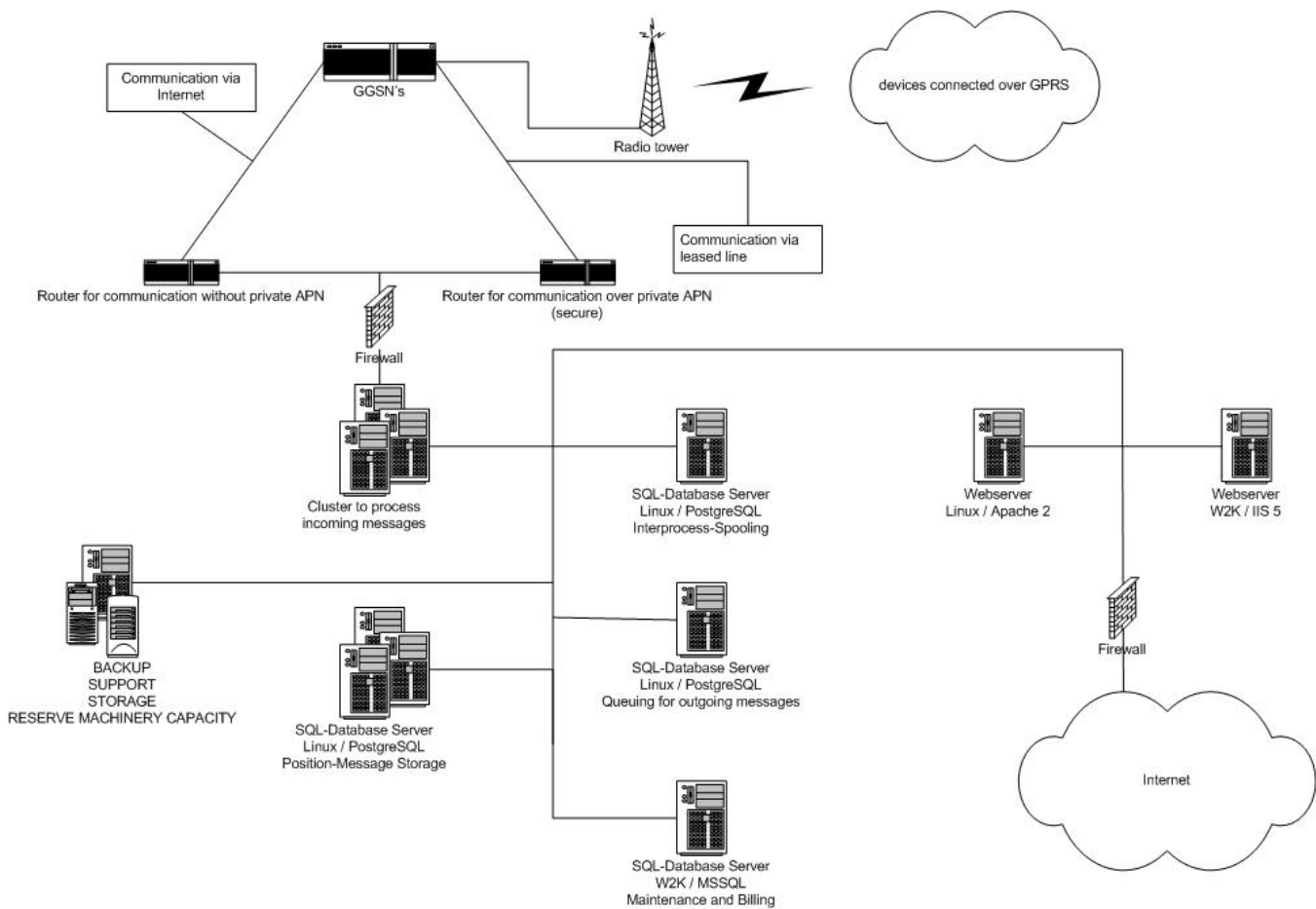
The described "way of life" in the YellowFox server centre gives us the opportunity to exchange hardware and software whenever needed, without the need to wait for the next maintenance window, as example. There even are no classic maintenance windows in the YellowFox server centre any more.

By going our way we improved the way of applying patches and bug fixes as well. Remember, there are no real dependencies, and therefore improvements, fixes and maintenance can happen without interfere with the customer and his tasks. Of course we use well known standard wherever possible to exchange data between these "functionality islands".

Most of the high level software involved in communication and processing is developed by YellowFox, without any involvement of 3rd party. This gives us a big advantage on applying new functions to our product.

YellowFox acts as a service provider, and keeps any further development in his own hands. There are no special requirements to run YellowFox, a modern browser and internet access will do. This means our customers can use YellowFox as they like, where they like, and whenever they like. Each customer runs the most updated software every time, and doesn't need to take care for updates as example - YellowFox will do this task for our customers.

Scheme

Communication via Internet

GGSN's

Radio tower

devices connected over GPRS

Communication via leased line

Router for communication without private APN

Router for communication over private APN (secure)

Firewall

Cluster to process incoming messages

SQL-Database Server
Linux / PostgreSQL
Interprocess-Spooling

Webserver
Linux / Apache 2

Webserver
W2K / IIS 5

Firewall

BACKUP
SUPPORT
STORAGE
RESERVE MACHINERY CAPACITY

SQL-Database Server
Linux / PostgreSQL
Position-Message Storage

SQL-Database Server
Linux / PostgreSQL
Queuing for outgoing messages

Internet

SQL-Database Server
W2K / MSSQL
Maintenance and Billing

Hardware

- Intel Modularserver
- Fujitsu Technologies Bladecenter
- BTO 2U Server
- BTO 1U Server
- HP Ethernet Switches
- Huawei Bladecenter
- Fujitsu Technologie Storage

Operating Systems

- Linux (OpenSuSE, Ubuntu LTS Server, Debian)
- Microsoft Windows Server

Database

- PostgreSQL
- Microsoft Windows SQL Server

Webserver

- Apache
- Microsoft IIS

Communication gateways

- developed by YellowFox based on .net