

The logo for serverloft features a stylized circular graphic composed of two overlapping arcs, one dark blue and one gold, positioned above the company name.

serverloft

Dedicated Servers for Demanding Solutions

I Product description for serverloft Dedicated Server

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I serverloft is a brand of PlusServer AG.

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1. Introduction

With its product Dedicated Server, serverloft offers powerful 19 inch servers with premium quality. In addition, customers are provided with an operating system on their servers, which is configured automatically. The offers especially address professional users, who need a high-quality server infrastructure for demanding applications.

serverloft leaves the complete configuration and management of the servers to the customers, but guarantees the replacement of a defective server within four hours.

serverloft is a brand of PlusServer AG, one of the worldwide leading hosting providers.

2. Product Description

The product serverloft Dedicated Server allows the customer to provide server based applications and software. For the duration of the contract period, serverloft supplies the customer with a server as well as a connection to the IP network of PlusServer AG, or of Level 3 with server location USA, respectively. The server is setup by serverloft and installed directly behind an optional switch, which is used if necessary. The switch serves as a direct connection to the PlusServer or Level 3 IP network.

The service includes the hard- and software, the connection to the PlusServer or Level 3 IP network, and all services ordered in connection with a serverloft Dedicated Server.

2.1 serverloft Dedicated Server comprises the following services:

- Provision of a server as Dedicated Server with full root access
- Allocation of IP addresses (max. quantity: 4)
- Installation of an operating system
- optional installation of a control panel depending on the operating system
- Connection to the global network internet per 100 MBit switchport
- Service Level Agreement (SLA)
- Replacement in case of defective hardware within four hours, 24 hours a day / seven days a week

2.2 PlusServer IP Network

The global PlusServer IP network is defined through the Autonomous System (AS) 8972. The AS 8972 merges all national and international connections of PlusServer. The IP network is based on an optical power grid, which is able to provide transmission capacity of multiple terabits per second by applying state-of-the-art technology.

The connection to important IX (Internet Exchange) locations in Europe, Asia and America enables PlusServer to carry out public peering with all important IP carriers, ISPs and content providers. Additionally, several private peering points exist. Further information about the status of public and private peering can be found at <http://www.ripe.net/perl/whois?AS8972>.

2.3 Network Infrastructure

The servers in the serverloft data centers are connected to the global network internet through 100 MBit/s switchports.

2.4 Data Center

2.4.1 Security

The serverloft data centers are protected 24/7 by a security service. Powerful video surveillance of the external facilities and of the entrance areas as well as the internal facilities ensures that no unauthorized persons can enter the technical service area.

2.4.2 Specific Admission Control

Photo recognition systems, biometric palm scanners, and card systems on all inner doors allow only authorized persons to enter the data centers. The security doors with safety glass and steel walls in the entrance and exit areas complete the data centers' comprehensive security concept.

2.4.3 Climatisation

The climatisation of the serverloft data centers follows the principle of N+1 redundancy on full load. All climate modules have a standby compressor and are fed in turns over a redundant climate circuit (a and b). Each circuit consists of a running and a standby pump. Only about 75 % of the available cooling capacity is needed to run the data centers at full load.

2.4.4 Electricity

The permanent power supplies are secured by a sophisticated redundancy concept of multiple power suppliers with several uncrossed conductors. If there is a power outage in spite of this, a UPS (uninterruptible power supply) guarantees that all important components are supplied with power until the emergency power generators take over. For stability reasons, multiple emergency power generators have been installed.

- Capacity: 36 hours at full load
- Refuelable during operation
- Contract enabling refueling within 180 minutes 24/7

2.4.5 Fire Protection

Two-stage detection systems as well as three-stage fire protection ensure operation even in case of a fire. Early detection systems for smoke and the automatic peripheral sprinkler systems (Marioff Hi-Fog-System) provide timely protection for the critical systems in the data centers and serverloft hardware against fire damage.

3. serverloft Dedicated Server Hardware

serverloft exclusively uses server hardware made by the manufacturer Fujitsu. Customers can choose between INTEL and AMD. The server hardware is custom-built for server operations and thus satisfies the highest demands. All server components are thoroughly tested by our quality management and are replaced within four hours in case of a failure. A load test before handing over the server to the customer guarantees a flawless functionality. The following server configurations are offered by serverloft. Individual changes in the configurations are not possible.

PerfectServer L	INTEL	AMD
Server barebone	Fujitsu PRIMERGY RX200	Fujitsu PRIMERGY RX330
Chipset	Intel 5000P	Serverworks HT2100 plus HT1000
Processor	1x INTEL Xeon DP E5405, 1x QuadCore with 4x 2.0 GHz	1x AMD Opteron 2344 HE, 1x Quad-Core with 4x 1.7 GHz
Main memory	4,096 MB DDR2-667 DIMM-RAM, ECC	4,096 MB DDR2-667 DIMM-RAM, ECC
Hard disk	2x 250 GB HDDs, SATA II, 7,200 upm	2x 250 GB HDDs, SATA II, 7,200 upm
Controller	RAID 0,1 by Intel ESB2-T	Hardware RAID 0,1 by LSI 1068
Remote management	Fujitsu ServerView, iRMC	Fujitsu ServerView, iRMC
Network card	2x 1 GBit/s	2x 1 GBit/s
Data transfer/month	5,000 GB	5,000 GB
IP Addresses	1 inclusive, up to four free	1 inclusive, up to four free

PerfectServer XL	INTEL	AMD
Server barebone	Fujitsu PRIMERGY RX200	Fujitsu PRIMERGY RX330
Chipset	Intel 5000P	Serverworks HT2100 plus HT1000
Processor	2x INTEL Xeon DP E5405, 2x QuadCore with 8x 2.0 GHz	2x AMD Opteron 2344 HE, 2x Quad-Core with 8x 1.7 GHz
Main memory	8,192 MB DDR2-667 DIMM-RAM, ECC	8,192 MB DDR2-667 DIMM-RAM, ECC
Hard disk	2x 500 GB HDDs, SATA II, 7,200 upm	2x 500 GB HDDs, SATA II, 7,200 upm
Controller	RAID 0,1 by Intel ESB2-T	Hardware RAID 0,1 by LSI 1068
Remote management	Fujitsu ServerView, iRMC	Fujitsu ServerView, iRMC
Network card	2x 1 GBit/s	2x 1 GBit/s
Data transfer/month	10,000 GB	10,000 GB
IP Addresses	1 inclusive, up to four free	1 inclusive, up to four free

PerfectServer XXL	INTEL	AMD
Server barebone	Fujitsu PRIMERGY RX200	Fujitsu PRIMERGY RX330
Chipset	Intel 5000P	Serverworks HT2100 plus HT1000
Processor	2x INTEL Xeon DP E5405, 2x QuadCore with 8x 2.0 GHz	2x AMD Opteron 2344 HE, 2x Quad-Core with 8x 1.7 GHz
Main memory	16,384 MB DDR2-667 DIMM-RAM, ECC	16,384 MB DDR2-667 DIMM-RAM, ECC
Hard disk	2x 146 GB HDDs, SAS, 15,000 upm	3x 500 GB HDDs, SAS, 7,200 upm
Controller	Hardware RAID 0,1 by LSI 1064e	Hardware RAID 5 by LSI 1068
Remote management	Fujitsu ServerView, iRMC	Fujitsu ServerView, iRMC
Network card	2x 1 GBit/s	2x 1 GBit/s
Data transfer/month	15,000 GB	15,000 GB
IP Addresses	1 inclusive, up to four free	1 inclusive, up to four free

3.1 Management

In the context of the service, the server is handed over to the customer together with the necessary access data. Moreover, full root/admin rights are given to the customer. Access is then possible e.g. via SSH or remote desktop. Additionally, there is the possibility to access the web based management system of the server through the ServerView/iRMC system by Fujitsu Siemens Computers. Comprehensive information about the server hardware status can be viewed here, and hardware settings can be made. After the customer has got his access data, he is responsible himself for any further administration and configuration of his server. Those tasks are not covered by our service.

4. NIC and Domain Services

The NIC (Network Information Center) services described below are offered in the context of the product serverloft Dedicated Server.

4.1. IP Addresses

The customer gets an officially registered IP address together with his serverloft Dedicated Server in due consideration of the valid allocation guidelines. If desired, up to four IP addresses can be assigned free of charge. When IP addresses from serverloft's PA (Provider Aggregate) address space are placed at the customer's disposal, they may not be further used by the customer after the end of the contract period.

4.2. Domains

Domains (TLD) can be ordered via the customer interface, which also contains an overview of pricing. During domain registration, the customer is entered automatically as Admin-C (Administrative Contact). Registrations of name servers, which refer to the server, are handled in the same way. By using the customer interface, the customer can also carry out respective change provider applications. When an order is placed, a fax is generated automatically in this interface, which the customer can then retrieve.

In every disagreement regarding names or brands between the customers and third parties, which are connected with the claim, utilization or registration of a domain name, the customer alone is responsible for the correct utilization of his chosen domain name. If third parties assert any claims against serverloft, the customer will dismiss serverloft from any third party claims.

4.3. Domain Name Service (DNS)

serverloft operates by default the Primary and one Secondary DNS for customer domains and guarantees the activation of the domain names on the internet. Optionally the customer may operate the Primary DNS himself.

4.4. Deallocation of Domains

After the end of the contract period, serverloft will claim no rights to the internet domain. The domain remains registered to the customer until the end of the contract period. If the customer does not arrange further delegation of the domain after that period, serverloft will de-allocate this domain.

5. Service Level

A Service Level Agreement is offered for serverloft Dedicated Server. It contains service availabilities, maximum recovery times, and maximum response times. The Service Level Agreement is provided as a separate document.

5.1. Availabilities and Recovery Times

The availability of the product serverloft Dedicated Server is calculated over the period of a business year, i.e. starting with the service allocation. The availability is defined as the ratio of the operating time, in which the service is available, and the business year.

The Time for Service Restoration (TSR) is defined as the period between failure notice and the service recovery. The failure notice is provided by the customer. The availabilities and maximum recovery times of the offered service level are given in the following table:

Service Level	Availability	TSR
Network Availability	> 99,90 %	4 h
Hardware Change		4 h

6. Service Management and Support

6.1. Hardware

serverloft takes over a warranty for the server hardware and guarantees hardware replacement within four hours in case of a technical failure. This warranty spans 365 days a year and 24 hours a day.

6.2. Software

serverloft addresses its offers to experienced users and provides the server as a pure root server without any technical support regarding the server's software configuration. Customers receive full root access and manage their servers completely on their own responsibility. Staff members from serverloft will not log on to the customer's server, and will not answer any questions regarding the software configuration.

6.3. Management

The customer is responsible himself for the management of his server. serverloft gives the customers full root access in order to manage the server's software configuration. Additionally, the customers get access to the ServerView/iRMC system of the server, thus being able to configure the server hardware. Moreover, the customers can choose the following automated operations in the serverloft customer interface:

- Reboot (hard/soft)
- Reinstallation
- Starting the server in a rescue system

6.4. Hotline

serverloft's hotline is at the customers' disposal 24/7 on 365 days a year. The hotline's number is given to the customer when the service is allocated. serverloft usually confirms incoming error reports from customers within one hour, and informs the customer in regular intervals about the troubleshooting status.

6.5. Scheduled Maintenance

serverloft announces scheduled maintenance, which could have an influence on or interrupt the customer's service, at least three days in advance. Scheduled maintenance works are usually carried out between 6 and 9 a.m.

7. Backup

The service FTP Backup Server enables the customers to copy their most important data to a separate backup server anytime and free of charge. For this purpose, serverloft runs multiple systems with a Hardware Raid 5 each, onto which the customer can backup his data. Each backup server has multiple terabyte storage capacity and is connected through a Gbit uplink to the serverloft network. The customer can setup a backup account in his customer panel and access the backup server (IP is shown in the customer panel) with the login data that has been chosen during the setup. The systems are controlled 24/7 by the serverloft Monitoring. In order to avoid an overload on the systems and to secure a flawless functionality, the technicians migrate the backups between the machines if necessary.