

Task: Research on technologies for the infrastructure to-be (Hardware, Hypervisor, Firewall, etc.) and list the components for the future infrastructure!

Table 1: Applications and runtimes of the LowTech GmbH

<b>Department</b>	<b>Application</b>	<b>Platform</b>	<b>Runtime</b>
<b>Finance</b>	Office	4 Clients	Windows XP SP 3
<b>HR</b>	Payroll	3 Clients	Windows 7 SP 3
<b>Warehouse</b>	Delivery	3 Clients	Debian Desktop 5.0 Lenny Web browser Firefox 3.6 on Client
<b>Finance + HR + Warehouse</b>	Legacy Accounting Software + Payroll + Delivery	1 Application Server	RHEL 9.4 MySQL Community 8.4.0 LTS Java Application (Java 8.0) JBoss Application Server (EAP 7.4) Java Servlet-Application (Java 3.0) Tomcat 9.0 Server PHP 8.3.6 program
<b>Finance + HR + Warehouse (BACKUP)</b>	Legacy Accounting Software + Payroll + Delivery	1 Application Server	RHEL 9.4 MySQL Community 8.4.0 LTS Java Application (Java 8.0) JBoss Application Server (EAP 7.4) Jakarta Servlet 6.0 Tomcat 9.0 Server PHP 8.3.6 program
<b>Sales</b>	Lead Management	10 Laptops	Windows 11 Microsoft Dynamics 365 Sales
<b>Sales</b>	CRM	1 Application Server + 1 Storage Server	RHEL 9.4 SAP HANA
<b>Sales</b>	CRM Storage		
<b>Customer Service</b>	CRM System of Sales Department	5 Laptops	Windows 7 SP 3
<b>Web shop + Operations</b>	CMS + Order Management	1 Web Server + 1 Application Server	Windows Server 2022 Microsoft SQL 2022 JDK 22

			Tomcat 9.0 Server Drupal 10.2.6
<b>Web shop + Operations (BACKUP)</b>	CMS + Order Management	1 Web Server + 1 Application Server	Windows Server 2022 Microsoft SQL 2022 JDK 22 Tomcat 9.0 Server Drupal 10.2.6
<b>Operations</b>		4 Laptops	Windows 11

Table 1: Hardware Specifications of the **to-be** infrastructure

Department	Hardware	Specs (OLD)	Specs (NEW)	Power consumption
<b>Finance</b>	4 Clients	Core 2 Duo SU7300, 4GB RAM, 250 GB HDD		500W
<b>HR</b>	3 Clients	Core 2 Duo SU7300, 4GB RAM, 250 GB HDD		500W
<b>Warehouse</b>	3 Clients	Core 2 Duo SU7300, 4GB RAM, 250 GB HDD		500W
<b>Finance + HR + Warehouse</b>	1 Application Server	2 TB HDD	Intel Xeon D- 2899NT 64 GB DDR4 RAM 2 TB HDD	1020W
<b>Finance + HR + Warehouse (BACKUP)</b>	1 Application Server	Xeon X5680 32 GB RAM 1.5 TB HDD	2 TB HDD	1000W
<b>Sales</b>	10 Laptops	ThinkPad X13 Gen 2 AMD Ryzen5		50W
<b>Sales</b>	1 Application Server	Xeon X5680, 16GB RAM 2 TB HDD	Intel Xeon M- 9480 128 GB DDR5	1000W
<b>Sales</b>	1 Storage Server	Intel Xeon E7 4830 32GB RAM	RAM (64*2) 48TB HDD (24*2)	1200W

		10TB Tape drive		
<b>Customer Service</b>	5 Laptops	ThinkPad T410 Intel Core i5 520M		100W
<b>Web shop + Operations</b>	1 Web Server + 1 Application Server	2 TB HDD	Intel Xeon D-2899NT 256 GB DDR4 RAM (64*4) 1TB SDD	1220W
<b>Web shop + Operations (BACKUP)</b>	1 Web Server + 1 Application Server	Intel Xeon E7 4830 160 GB RAM 500 GB SDD 3 TB HDD		1000W
<b>Operations</b>	4 Laptops	ThinkPad X13 Gen 2 AMD Ryzen5		50W

Total **5 Servers** in which **3 are backup** server for web shop and warehouse.

## References

[www.intel.com/content/www/us/en/products/sku/235750/intel-xeon-d2899nt-processor-30m-cache-up-to-3-10-ghz/specifications.html](http://www.intel.com/content/www/us/en/products/sku/235750/intel-xeon-d2899nt-processor-30m-cache-up-to-3-10-ghz/specifications.html) (Intel Xeon D-2899NT)

<https://www.servershop24.de/en/cisco-64gb-4drx4-ddr4-ram/a-129021/> (DDR4 64GB)

<https://www.intel.com/content/www/us/en/products/sku/232592/intel-xeon-cpu-max-9480-processor-112-5m-cache-1-90-ghz/specifications.html> (Intel Xeon Max-9480)

<https://www.speicher.de/arbeitspeicher-64gb-ddr5-cisco-ucs-c240-m7-ram-rdim-sp510833.html> (DDR5 64GB\*2)

[https://www.westerndigital.com/products/internal-drives/wd-red-pro-sata-hdd?cjdata=MXxZfDB8WXww&cjevent=7c5f35c20de411ef80e303890a18b8fa&utm\\_medium=af11&utm\\_source=cj&utm\\_content=Shop+Best+Sellers,+Canada&cp1=6361382&utm\\_campaign=bestsellersca&utm\\_term=09-22-2021&cp2=Future+Publishing+Limited&sku=WD240KFGX](https://www.westerndigital.com/products/internal-drives/wd-red-pro-sata-hdd?cjdata=MXxZfDB8WXww&cjevent=7c5f35c20de411ef80e303890a18b8fa&utm_medium=af11&utm_source=cj&utm_content=Shop+Best+Sellers,+Canada&cp1=6361382&utm_campaign=bestsellersca&utm_term=09-22-2021&cp2=Future+Publishing+Limited&sku=WD240KFGX) (HDD 24GB\*2)

<https://erpiseasy.com/2020/12/30/what-is-sap-crm/#:~:text=The%20latest%20version%20is%20SAP,supported%20until%2031st%20December%202027.> (SAP CRM 7.0)