

SUSE LINUX
openexchange server 4.1



SUSE LINUX Openexchange Server 4.1
Features | Functions | Benefits

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**Features
Functions
Benefits**

SUSE LINUX Openexchange Server 4.1 is a team-building, all-in-one communication and groupware solution. Based entirely on open standards and a modular architecture, it delivers maximum functionality and minimum investment risk.

SUSE LINUX Openexchange Server 4.1 enables the coordination of people, information, documents, appointments, projects, contact information, and resources to streamline and accelerate teamwork in companies of all sizes and sectors.



Function

Benefit

2 General Specifications		
	Function	Benefit
Kernel 2.4.19	Operating system kernel	Being Open Source software, the kernel boasts an unmatched stability and dynamic development. The source code is available, enabling any adaption and providing complete vendor independence.
Multiprocessor support for up to 32 CPUs	Processor management	Maximum processor utilization and optimum performance through almost linear scaling.
Support for up to 64 GB RAM	Memory management	Support for up to 64 GB RAM enables high scalability for applications consuming a lot of memory.
Hardware RAID support	Provision of RAID functionality	The most effective way to prevent loss of data. SUSE LINUX Enterprise Server, on which SUSE LINUX Openexchange Server 4.1 is based, supports all common RAID controllers.
Journaling file systems	Modern file management	By means of their journals and logs, journaling file systems guarantee the speedy reconstruction of all data following an unexpected reboot.
ACL (Access Control Lists) support	Control and management of access permissions	ACL support enables the precise assignment of permissions for files and directories to an extent that greatly exceeds the conventional possibilities for assigning permissions (user, group, others).
LVM	Logical Volume Manager	LVM enables repartitioning of supported file systems without disrupting data availability.
Failover/multipathing	Redundant connection to storage devices	Thanks to the redundant connection to a storage device, data transfer can be sustained even if individual connections fail.

General specifications

Function

Benefit

	Function	Benefit
<p>Interface <i>(New Function)</i></p>	<p>Integration of a WebDAV/XML interface with detailed documentation for the calendar, contacts, and tasks units. The interface supports all functions provided by SUSE LINUX Openexchange Server (e.g., conflict management and availability check in the calendar)</p>	<p>The interface enables data exchange between SUSE LINUX Openexchange Server 4.1 and third-party products or individual programs. For example, a project management application can access important appointments in the SUSE LINUX Openexchange Server 4.1 calendar, making use of the conflict management and the appointment query.</p>
<p>Permissions <i>(New Function)</i></p>	<p>A dedicated delete/owner permission is now available. The delete permission is set under the write permission tab. As previously, all persons with write permissions can delete an object. Additionally, a person with write permissions can be designated as the owner with delete permissions. The delete permission can only be assigned to another person by the owner of the object.</p>	<p>More precision in the assignment of permissions and more security for the deletion of objects. Improved compatibility with Outlook/Exchange (iSLOX and migrations).</p>
<p>Layout <i>(New Function)</i></p>	<p>The user can move the right navigation frame to the left. The previous shortcuts in the right frame are expanded by a task view, folder view, and instant messaging. Furthermore, the shortcuts can now be activated or deactivated by the user. These user-specific settings are saved and restored at the next login.</p>	<p>More flexibility. The user has the frame on the side he is used to from Outlook. The user can set his personal view and activate the modules he needs for his personal work environment.</p>
	<p>The shortcuts in the right/left frame can be defined globally by the administrator in a configuration file. The administrator can determine which shortcuts are made available in the company and in which order they are displayed to the user. The number of months displayed in the miniature calendar can also be defined in a configuration file.</p>	<p>This gives the administrator the flexibility to provide the modules that are really needed in the company.</p>

General specifications

Function

Benefit

Folders (New Function)

For the optimum integration of Outlook and functional expansion of the web interface, SUSE LINUX Openexchange Server 4.1 makes use of "Public Folders" that can be assigned permissions like in Outlook/Exchange. On the folder level, object templates are used to pre-define permissions for newly created objects. If necessary, these can be modified on the object level. Like Outlook folders, "Public Folders" only contain objects of a certain format. The following folder types are supported: appointment, contact, task folders, and an unspecified folder. Folder permissions can be assigned on the Outlook folder level and in the SUSE LINUX Openexchange Server 4.1 web interface. Other supported functions:

- Assignment of folder permissions for selected persons and groups.
- Mapping of the permission concept of SUSE LINUX Openexchange Server.
- Nesting of various object types (e.g., a contact folder can contain a task folder or an appointment folder).
- Create, edit, move, delete folders

In accordance with the user and group-specific needs, contents can now be structured in folders and joined in logical units (e.g., all appointments, tasks, and contacts for a project are located in one project tree). This increases the transparency and enables more efficient operations.

Mail server/integrated services

Cyrus IMAP 2.1.9

IMAP server

Efficient IMAP/POP server with central administration and comprehensive support of the IMAP extensions (quota, mailbox referrals, search extension, shared mailbox storage, etc.).

Postfix 1.1.11

Mail transfer agent

Postfix guarantees maximum reliability and easy configuration. One of the most widely-used and powerful MTAs.

Apache 1.3.26

Web server

Apache is the world's most widely-used web server for the implementation of Internet and intranet sites with a matchless stability. Of course, Apache supports Java servlets, PHP, and Perl.

		Function	Benefit
Mail server/integrated services			
OpenLDAP 2.1.4	LDAP server/directory service	High stability through transaction-based back-end, interoperability through support of the LDAPv3 standard.	
SpamAssassin	Spam filter	Filtering of undesired e-mail messages (commercial mail, etc.) increases the efficiency of the mail processing by users, as relevant and superfluous messages are separated by the system.	
Samba PDC	Print/file services	Samba smoothly integrates existing Windows clients and servers. Thus, Samba guarantees comprehensive investment security.	
DHCP server	Dynamic assignment of IP addresses	The automatic assignment of IP addresses prevents IP address conflicts and facilitates the configuration of the clients, especially in the event of a relocation. Can be configured by way of the web front-end.	

Administration/installation			
YaST2	Administration/installation assistant	SUSE's graphical tool for all important systems administration functions.	
Administration front-end	Graphical administration tool for the groupware unit	Almost all administration functions are made available in a graphical user interface, thus minimizing the workload of the administrator.	
Distributed services	The administrator can use configuration files to distribute services (e.g. database, mail, LDAP server) to different servers.	For large numbers of users, optimum scaling is possible by distributing the system, thus ensuring high performance.	
Internationalization	Support of international character sets, date formats, and currencies	Optimum representation of information in the respective country-specific character format.	

	Function	Benefit
Security		
OpenSSL	Data encryption	OpenSSL implements data encryption between applications and components on various levels for maximum privacy.
OpenSSH	Remote administration	Remote administration from a remote host via a channel with strong encryption.

Groupware		
Browser-based system	Client-independent system, works with various new-generation browsers (e.g. IE from version 5.x, Netscape from version 5.x, Mozilla from version 1.x, Opera from version 6.x).	System administrators do not need to maintain client programs. The groupware can be accessed from anywhere in the world with any host having an Internet connection and a browser.
Permission concept/ group management	Restriction of access permissions on module level, definition of read/write permissions on object level, creation of groups from the LDAP server, easy resolution of groups by users and resources.	Every employee can assign permissions. The administrator no longer needs to take care of the access limitations for individual folders or group calendars. This reduces the administrator's workload and provides more flexibility and responsibility among the employees.
Templates	In the groupware modules, users can individually define default read and write permissions.	Quick and uncomplicated assignment of permissions by way of predefined templates.
Linking of objects	Cross-module linking of any objects, concurrent linking of multiple objects with another object (1-to-1 and n-to-1 links).	No burdensome, time-consuming searches for related information (e.g., all information associated with a project are linked to this project: appointments, documents, contact persons, forums, knowledge...).
Notes	In all modules, an unlimited number of notes can be associated with objects. Distinction by the access permission (private or group-specific like the associated object).	For example, private notes can be attached to an address (e.g. as contact history) and be invisible for other users. This enables an even finer granulation of the permissions and depth of information.
Synchronization	Permission-specific synchronization of SUSE LINUX Openexchange Server 4.1 with Outlook/Palm client data. Supports the synchronization of appointments, contacts, and tasks. Synchronization settings via a comfortable wizard.	SUSE LINUX Openexchange Server 4.1 data can be maintained in Outlook and is therefore also permanently available offline. Outlook/Palm synchronization allows you to use data on your handheld.

Groupware

Function

Benefit

Portal page: overview	Today's and new appointments, tasks, projects, corporate information, and new e-mail messages at a glance.	Always up to date following the login. No time-consuming searching in the system.
Portal page: topical	All new information sorted by modules on one page (time window can be configured)	Quick retrieval of all new and relevant information.
Calendar, tasks, projects: View templates <i>(New Function)</i>	View templates can be created for appointments, tasks, and projects. For example, a secretary can save the calendar of her boss as the default template. Subsequently, the calendar of the boss will be opened when the calendar icon is clicked.	This enables very quick and effective operations through access to defined information (e.g., appointments of a specific group with a click).
Calendar: resource planning	Resources and resource groups can be displayed in the calendar	Practical resource management in connection with private and group appointments (conference rooms, projectors, car fleet, etc.).
Calendar: group calendar	Transparent view of all appointments of a group is possible in a single calendar	Quick and transparent overview of all appointments in a group, in a calendar, or list.
Calendar: availability check/queries	When an appointment is requested, the system checks whether this appointment is available. If not, it proposes alternatives. The availability of the individual participants and resources are displayed graphically in an availability check.	The system facilitates the user's search for available appointments. The availability check can be used to see who is not available at the selected time. Reliable, quick coordination of appointments with multiple participants without burdensome phone calls or e-mail communication.
Calendar: conflict management	The system indicates existing conflicts which can either be ignored or lead to an appointment request or availability check.	The system informs the user about conflicts without submitting an appointment request. Appointments can be set in a quick and easy manner. The system takes care of the rest and handles the monitoring for the user.
Calendar: holidays/time zones	By way of the web front-end, the administrator can mark country-specific holidays, and the users can mark personal holidays. Holidays can be equipped with various conflict management functions (e.g. regional holidays). Time zone support enables globally consistent appointment management.	The product is prepared and designed for international deployment.

Groupware

Function

Benefit

Calendar: Task series <i>(Optimization)</i>	The task series function has been substantially expended. For example, series such as “appointment on the second Monday of the month every three months” can now be created.	Largely implemented like in Outlook.
Calendar: Task series <i>(New Function)</i>	The Magic SUSE menu now enables the selection of participants/groups/resources that are represented as a team view in a parallel day view (parallel day view of multiple participants and resources). By means of a configuration file, the administrator can determine the maximum number of parallel day views, thus taking various screen resolutions into consideration.	The representation of parallel calendars provides transparent appointment information at a glance. Thus, overlapping appointments and location-specific appointment conflicts can be identified immediately.
Participation confirmation/ e-mail reminder	Every participant of an appointment can confirm or reject an appointment. The participants are notified about the appointment by e-mail. Every participant can set a repeated reminder for the appointment.	The creator and all participants of an appointment can view confirmations and cancellations. Reminder function for participants who neither confirmed nor rejected the appointment.
Contacts (contact partners/company addresses)	Central access to internal and external contacts. Contacts can be created with or without an associated company address. Export in vCard format, private and group-specific notes for every contact partner and every company.	Bundling of address files and internal phone lists. No burdensome searching for up-to-date internal or external contacts. Central address management minimizes the workload for data maintenance.
Contacts: Consolidation <i>(Optimization)</i>	The contacts unit was technically revised. Moreover, when an address is deleted, the user can now decide whether to delete the contacts associated with this address or to keep the contacts without any company address association.	
Addresses: search functions	Special search with combinable search criteria, birthday list	Address list display can be filtered, e.g. by units with revenue figures and status.
New e-mail notification	Visual and acoustic notification of new e-mail messages. The administrator can make various audio files available to the users for the acoustic notification.	Every user can individually select the most suitable notification type. When a new e-mail message is received, the user can be notified by means of a pop-up window, flashing e-mail icon, or audio signal.

Groupware

Function

Benefit

Tasks: categories	Project tasks, delegated tasks, general tasks, overdue tasks, tasks of the next 7 days, archive	Quick overview of due and delegated tasks saves time for the team management, increases the effectivity, and guarantees optimum cooperation and coordination in the team.
Tasks: reminder/resubmission	User-configurable resubmission of tasks, auto-matic reminder on the portal page on the resubmission day	Minimization of overdue tasks
Tasks: allocation of costs	Allocation of target/actual costs, calculation of cost variances	Costs can be recorded on a task-specific basis, enabling variance monitoring. Supports the compliance with cost budgets.
Projects: milestones	Definition of important project events with automatic reminder function	Information on important project events are known to all project participants. Prevents the unnecessary delay of project terms and optimizes project-specific workflows.
Projects: tasks/comments	Cumulation of the costs for project tasks, creation of an unlimited number of user-specific comments on projects	All tasks associated with the project are displayed in the project view. This guarantees a quick overview and results in an excellent information status of all partners participating in the project.
Projects: Deletion <i>(Optimization)</i>	Projects can also be deleted. Optionally, the tasks associated with the project can also be deleted or detached from the project (general tasks).	
Documents: versioning, etc.	Documents inherit folder permissions, automatic versioning of documents, moving of folders and documents	Easy, permission-specific access to centrally stored documents via a secure Internet connection guarantees availability of important documents around the clock.

Groupware

Function

Benefit

<p>Documents: WebDAV <i>(New Function)</i></p>	<p>The WebDAV/XML interface also exists for the documents unit in SUSE LINUX Openexchange Server 4.1. Thus, this unit can be accessed with external applications and users can easily access SUSE LINUX Openexchange Server 4.1 folders and documents directly from standard office applications (MS Office, OpenOffice.org, StarOffice, browsers). The SUSE LINUX Openexchange Server 4.1-specific folder and document permissions are applied consistently:</p> <ul style="list-style-type: none"> ■ Subfolders and documents are saved or newly created with the permissions of the respective parent folders. ■ When a document that already exists with the same file name is saved anew, a new version is generated automatically. ■ The permission to delete documents and folders is taken into consideration as defined in SUSE LINUX Openexchange Server 4.1. 	<p>The interface enables improved integration in existing structures, thus providing true added value: existing data sets from various applications (ERP, project management, CRM, etc.) can be exchanged with SUSE LINUX Openexchange Server 4.1 in real time or via synchronization.</p>
<p>Knowledgebase: full-text search</p>	<p>Knowledge hierarchies can be freely configured, indexed, and full text searches performed</p>	<p>Company and employee know-how is collected at a central point and is available to the entire company, even if an employee departs.</p>
<p>Forum</p>	<p>Creation of an unlimited number of forums, e-mail notification when messages are replied to, read messages are marked, subscription to forums</p>	<p>In combination with projects, this is a very effective, modern communication tool. A discussion culminating in a solution can be reconstructed and supports the concept of a "learning" enterprise.</p>
<p>Pinboard</p>	<p>Virtual blackboard, automatic deletion of old pinboard messages, display of important messages on the portal page</p>	<p>Important information is visible to users on the portal page following the login.</p>

Groupware

Function

Benefit

Web mail

Worldwide secure mail access, familiar through IMAP4 support, use of the common address book functions including distribution lists and signatures, vCard support, delivery receipt

The company's internal mail can be accessed with a browser. E-mail can be sent with diverse company accounts. Thanks to the integration in the groupware, access to the web mail is possible at any time without renewed login to the mail server.

Confirmation and rejection of appointments and tasks directly from the web mail application

Time-saving procedure for simplified appointment and task management.

Adding of e-mail addresses in the contact management of the groupware

Contacts that are available via e-mail can easily and speedily be added in the central groupware contact management and associated with existing company addresses, if this is desired.

Generation of a delivery receipt

The user can request delivery receipts and edit delivery receipts requested from him. The delivery receipt is an additional security feature that informs the sender about the receipt and the time of receipt of important e-mail messages.

Web mail: Sorting, search, performance
(Optimization)

The following optimizations have been implemented:

- E-mail messages can be copied.
- E-mail messages that have been replied to are marked with a flag. Moreover, the flag can manually be set via "Options".
- Sorting by the status (new, unread, read)
- Attached text, HTML, and image files can now be viewed inline without opening a new window.
- Forwarded messages are displayed as mail attachments.
- Substantially increased performance for UU-encoded messages
- Predefined search parameters.
- Sorting and browsing the search result.
- Optimized search accuracy.
- New button for viewing the next unread message.

Function

Benefit

Outlook real-time connection
(New Function)

The connection of the Outlook clients is implemented on the basis of the WebDav/XML interface and enables real-time availability of the data in Outlook. It provides all relevant information available on the SUSE LINUX Openexchange Server 4.1 and also supports Openexchange Server-specific functionalities such as the conflict management of the appointment scheduler. On the Outlook side, the functionalities are implemented by way of a MAPI message store provider, transport, address, and hook provider. These providers exchange the data with the SUSE LINUX Openexchange Server 4.1 via the WebDAV interface and LDAP and ensure the required object mapping from Outlook to SUSE LINUX Openexchange Server 4.1 and vice versa. Conceptually, the system is based on the permission concept of SUSE LINUX Openexchange Server 4.1 (various permissions are assigned on the object level). However, to ensure optimum integration of Outlook, "Public Folders" are also implemented on the Openexchange Server side, thus enabling full coexistence of the web interface and Outlook as user front-ends. Apart from the real-time connection of the Outlook clients to the Openexchange Server, the offline functionality with Outlook will also be supported by the end of 2003 (not in version 4.1). However, the data can be made available offline by means of a separate replication software.

With iSLOX, companies that want to enable their users to continue to use Outlook can minimize their migration workload: users will find their accustomed Outlook environment with a few minor modifications that they will quickly get used to. Companies can keep their training costs low, as most changes merely affect the server side.

Tasks
(New Function)

Tasks are implemented as in Outlook with Exchange: Tasks primarily serve the personal work organization. For this reason, only the creation of "Personal Tasks" is supported. The allocation of tasks to projects like in SUSE LINUX Openexchange Server 4.1 is not supported, as this module does not exist in Outlook. Nevertheless, a project-specific task organization can be improvised by allocating tasks to a project folder (Public Folder). The tasks that are placed in such folders can then viewed by other persons who have access to the project folder. Task series are not supported, as they do not suit the task concept of SUSE LINUX Openexchange Server 4.1.

In contrast to Outlook with Exchange Server, all objects only need to exist once in iSLOX: appointments for persons who do not have access to a folder do not need to be copied to their personal calendar in order to make them visible for these persons.

iSLOX

Function

Benefit

<p>Calendar <i>(New Function)</i></p>	<p>As usual, appointments can be created in Outlook for individual users as well as for groups. The free/busy functionality is supported, enabling an availability check. Resources can also be checked and booked. Appointment series as well as the acceptance and rejection of appointments are supported. An additional feature is the SUSE LINUX Openexchange Server 4.1-specific conflict management which actively issues notifications whenever appointments overlap.</p>	<p>See above</p>
<p>Contacts <i>(New Function)</i></p>	<p>The permission-specific access to all contacts in SUSE LINUX Openexchange Server 4.1 is possible from Outlook. Using "Public Folder", contacts can be organized in various virtual address books with different access permissions.</p>	<p>See above</p>

Third-party integration

<p>Instant Messaging by DyCE <i>(New Function)</i></p>	<p>Integration of chat, instant messaging, and synchronous telecooperation. The integration of SUSE LINUX Openexchange Server 4.1 with DyCE Instant Messenger from go4teams GmbH provides users with the following functions in a portal component:</p> <ul style="list-style-type: none"> ■ Display of personal contact list with topical awareness information (which participants can currently be reached?). ■ Transmission of instant messages to participants from the contact list. ■ Online conferences in chat sessions for quick coordination, even in larger groups. ■ Real-time cooperation tools such as the shared whiteboard, cooperative text editor, joint brainstorming, and cooperative mind-mapping for shared content editing. These cooperation tools can be started directly from the portal component. 	<p>These functions can be deployed for communication purposes and for the distributed cooperation between two or more system users. Though these functions are provided by a separate application, the integration with the SUSE LINUX Openexchange Server 4.1 portal guarantees their prompt availability in the user's work context.</p>
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Third-party integration

Function

Benefit

Ferrari Fax/SMS server

Fax and SMS – product integration of OfficeMaster™ ferrariFAX for Openexchange prepared in YaST

- Support for new fax hardware.
- Available in three versions for 10 users, 25 users, and an unlimited number of users.
- The products for 10 and 25 users make use of AVM or Eicon CAPI cards.
- The product for an unlimited number of users makes use of the new OfficeMaster™ cards from Ferrari Electronic, which are available in six variants.
- The new hardware is autodetected by the administration program and configured with suitable default values.
- The fax and SMS services can be assigned separately to every user.
- LDAP fields and graphics (logos) can be adopted in cover pages.
- Internally, the fax server was entirely switched to UTF8 in order to ensure the correct processing of accented characters and other special European characters in e-mail messages and cover pages.
- A new client software is available for Windows, Linux/Unix, and Mac OS X, enabling the transmission of fax messages by printing on a fax printer. The fax number is queried in a dialog in which the user is shown his address books via an LDAP query. A local fax printer that locally converts documents into fax messages is available for Windows clients. The client software supports the transmission on behalf of other users. The use of groups enables the routing of reply faxes to group mailboxes (e.g., sales) instead of a person.
- The LDAP schema of SUSE LINUX Openexchange Server 4.1 was expanded to manage additional fax-specific properties for users in the SUSE LINUX Openexchange Server 4.1 administration interface.

Thanks to the integration of the fax server installation in the installation routine (YaST) of SUSE LINUX Openexchange Server, the entire fax server setup is performed without any additional workload, providing an efficient, perfectly tuned system of groupware and fax functionalities.