

Software im Netz

Recommendations for software suitable for school networks

English version of the results of the Tett nang
conference, March 2005 /
Final report: 11.05.2005



Imprint

Editor

Landesmedienzentrum Baden-Württemberg (LMZ)
Projekt „Support-Netz“
Rosensteinstraße 24
70191 Stuttgart

Authors

Mr. Bischoff	Südwestrundfunk SWR
Mr. Dahmen	Macromedia Central Europe
Mr. Dierenbach	swissolution AG
Mr. Dr. Hettinger	Kultusministerium Baden-Württemberg
Mr. Ehmann	Software im Netz, Support-Netz, LMZ
Mr. Falk	Software im Netz, Support-Netz, LMZ
Mr. Frei	Software im Netz, Support-Netz, LMZ
Mr. Kern	Support-Netz, LMZ
Mr. Kneier	cobra Vertrieb für Forschung & Lehre GmbH
Mr. Kühn	Software im Netz, Support-Netz, LMZ
Mr. Lawrenz	Cornelsen Verlag GmbH & Co oHG
Mr. Lehmann	Software im Netz, Support-Netz, LMZ
Mr. Leppert	Klett Verlag Stuttgart
Mr. Mandl	Norman Data Defense Systems GmbH
Mrs. Rabaschowsky	Corel GmbH
Mr. Rauch	Software im Netz, Support-Netz, LMZ
Mr. Resch	Software im Netz, Support-Netz, LMZ
Mr. Schätti	co.Tec GmbH
Mr. Schurer	Stadt Konstanz
Mr. Siebert	Adobe System GmbH
Mr. Sokolowski	Support-Netz, LMZ
Mr. Strasser	Co.Tec GmbH
Mr. Walter	Software im Netz, Support-Netz, LMZ

More information:

www.support-netz.de
www.lmz-bw.de
www.medienoffensive-schule-bw.de

Published: **2005**

© Landesmedienzentrum Baden-Württemberg

Introduction

In the past years computers have been increasingly employed in schools. In the meantime, these computers are to be found not only in computer rooms but also in the classrooms and technical rooms as well as in other places in the schools. In the multimedia recommendations ("*Multimedia-Empfehlungen*") that have been published jointly with the Local Authority Associations of the region (*Land*), appropriate equipment versions are described in the section "Model Networked School" ("*Leitbild Vernetzte Schule*"). A fundamental characteristic feature of a networked school is simple access to all programs via the school network. Every pupil and every teacher should be able to access his/her resources and programs from every workplace at any time.

If one looks at the supply of educational software available, then it can unfortunately still be seen that many programs do not satisfy these requirements. Programs that can be used at only one workplace or by only one user are not suitable for use in the school network. The amount of time and effort for installation and maintenance of these programs would simply be too large. The objective should rather be to make software available server-based, as far as it is necessary, and to manage the necessary local changes of the client side with standardised packages.

The licensing models available up to now also still leave a lot of room for improvement. For example, it makes little sense to speak of classroom-specific software and corresponding licensing models if in fact the actual situation requires something quite different. Since the financial budgets of the local authorities and of the bodies responsible for the funding of school equipment are being reduced more and more, it is no longer justifiable that every school in a community buys software for lessons and then uses it for merely a small teaching unit. It would be more appropriate to think in terms of other models, from municipal licences to regional (*Land*) licences. In addition, the distribution channels for the transmission and installation of the software packages should be improved as well.

The following recommendations for software that is suitable for school networks were compiled at the meeting of the working group for network software ("*Software im Netz*") in Tettnang on 8 March 2005 together with representatives of well-known software producers and software providers. Experiences gathered by the schools (in the meantime over one thousand schools) in Baden-Württemberg that use the model solution "*Musterlösung*" for school networks formed the background for this. However, the authors have tried to formulate the recommendations in a general way so that they can also be applied to other school network solutions.

1. Installation location and installation procedure

The software must be installed server-based whenever possible.

1.1 It is best if the program is installed once in a directory on the server and can then be invoked by each client in the network by means of a link.

1.2 However, a simple installation procedure should be supplied, too, for the client-side installation. Any necessary client-side changes are to be kept as MSI file.

1.2.1 The installation is to be carried out automatically with higher privileges.

1.2.2 For this, an MSI package is necessary (in both cases), which can be installed “unattended”.

1.2.3 Installations of the type “[...] and repeat this step on each client” are not practicable (single point of administration).

1.3 The installation path on the server and on the client should be able to be freely chosen (dialog in the administrative setup) and should in any case conform to the standards (c:\programs and not directly below c:\).

1.4 The installation procedure must be documented in detail and separately for the server installation and the client installation.

1.5 It is desirable that the software should be usable in a terminal server environment.

2. Privileges and filing of data sets on using the program

2.1 The software should be fully usable and configurable when it is used without administrator or power user privileges.

2.2 All user-specific data, program configurations, etc. may only be stored in the home directory of the user (e.g. My Documents). Any other write access should not be necessary.

2.3 Entries in system directories (e.g. c:\winnt) or computer-specific registry branches may not be made during runtime.

2.4 For temporary files, the Windows directory specified for this purpose (below *Documents* and *Settings...*) must be used.

2.5 Programs that open the files in RW mode should no longer exist (*read-only* compatibility modus).

3. Working jointly, multiple users, learning progress

3.1 If possible, the software should not need its own user administration; instead, it should work with the login name in the network.

3.2 In any case it should be possible to perform the authentication regarding the network, for example, with LDAP etc.

3.3 If that is not possible, at least a readin procedure via a standardised list should be possible (csv).

3.4 The storage location for learning progress should be in the server-based home directory of the pupil. If a common storage location is needed, such as, for example, a project directory, the physical storage location should not be recognisable to the pupils.

3.5 Since storage restrictions are possible on the server, the size of the required storage space should be specified.

4. Decentralised working

The software must be able to be used by any user (not user-dependent); it must also be able to be installed on any computer (not workstation-dependent).

That means: *Every pupil and every teacher should be able to access his/her resources and programs from every workplace at any time.*

5. Software protection

5.1 No hardware protection mechanisms should be employed for using the software in the school network.

5.2 It must also be possible to run programs and multimedia applications without inserting a CD (DVD).

5.3 For a transitional period that is to be defined by the respective manufacturers themselves, it is possible to deliver a CD/DVD (serving as a pure media data carrier and not able to be installed as such) as ISO image and to allow the use of a virtual drive.

6. Licensing model

6.1 Apart from the existing licence contracts, licence contracts should, if possible, be entered into with the school authorities, the town or district authorities, or at *Land* level.

6.2 Modern school teaching requires flexible licences, because there are neither fixed users nor fixed workplaces.

6.3 In order to be able to prepare lessons, the teacher should have the software available at home as well.

6.4 If possible, additional licences for pupils should be offered.