**Cendio® ThinLinc®**

# TECHNICAL USE CASE
### Creating solutions with ThinLinc!

## ThinLinc Web Access as a solution for accessing specific apps from Chrome OS devices

### School - Upper Secondary School

XFCE Desktop, Google Chromebook,
Chrome OS, Ubuntu Server,
Windows applications, Crossover.

### PURPOSE

To provide access to Windows applications
for Chromebook users.

### PRE-CONDITIONS

Users had Chromebooks provided by the
school. The students had the need to access
specific Windows applications on the Chrome
OS.

### RESULTS

ThinLinc was implemented to provide the
server-based XFCE Linux Desktops to the
users. Within the XFCE Desktop the users
access the WIndows applications through
Crossover.

Chromebook

**CLIENT**

LAN

**ThinLinc®**
Web Client

ubuntu

**1** Master
**1** Agent

Windows
Applications
(through Crossover)

Unity  XFCE

**SERVER**
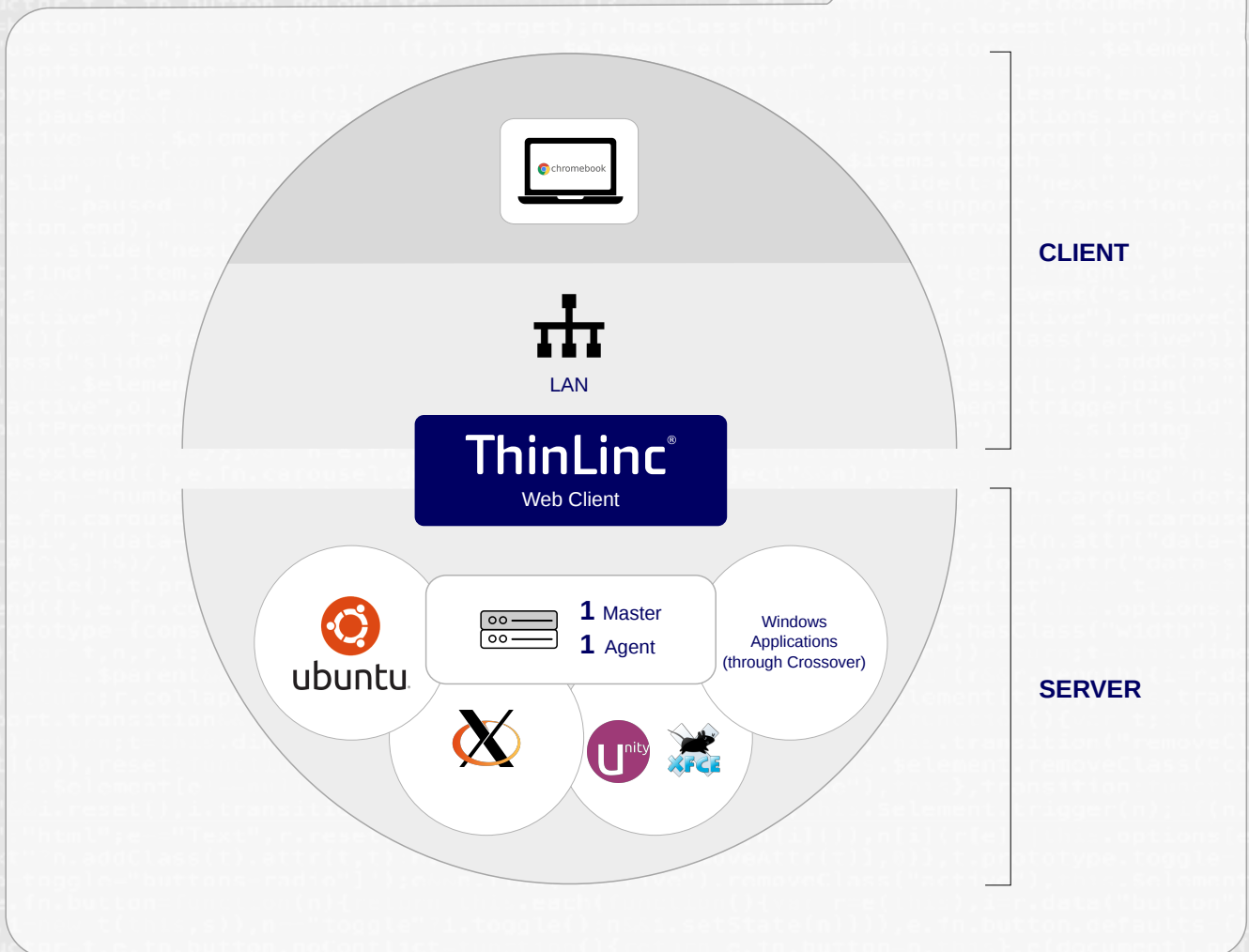
### ADDITIONAL INFORMATION & OTHER POTENTIAL USES:

Organizations demanding a solution for accessing mixed operational systems may implement ThinLinc
as a potential solution. In addition, it is possible to run demanding applications in Chromebooks,
since it is processed in the server and published through ThinLinc.

## CASE DESCRIPTION / STORY

### ThinLinc Web Access as a solution for accessing specific apps from Chrome OS devices in a Swedish school

In the information technology landscape, with a big mix of hardware and operating systems choices, it may be crucial for users to access the programs they need from a single device. Within this context, the integration of different systems can bring ease for the user, as well as challenges for the IT administrators, as they need to find flexible solutions that allow such integration. Through a creative approach, using ThinLinc and other components, the IT expert and teacher Johan Lifvergren made it possible for Hagagymnasiet school students to access native Windows applications from Chromebooks running Chrome OS.

Over the past few years, Hagagymnasiet school has introduced Chromebooks for students' use, through which regular Google apps are offered, in addition to the Chrome browser. Johan's solution uses the ThinLinc Web Access (HTML5) client on Chrome to access Linux XFCE and Unity desktops running on an Ubuntu server. On the XFCE desktop, students can access applications that would typically run on Windows only, as well as DVD media, including the touchscreen function. This arrangement is possible due to the use of the solution called Crossover. The applications used are "Min Släkt" and "Databases" from Sveriges Släktforskarförbund. In addition to student access through Chromebooks, some teachers access programs from their laptops running macOS. "ThinLinc's biggest strength is that it works in mixed operating system environments," Johan explains. He is a Linux enthusiast since 1995 and likes to develop systems to solve issues "Since my childhood, I am curious and like to understand how things work."

Hagagymnasiet is an upper secondary school offering study programs in childcare and leisure, science, social science and programs for students with special needs. It is a public school which has 600 students and is located in Norrköping, Sweden. It was the first school in Norrköping to have internet access during the 90s. Hagagymnasiet has a long time relationship as a customer with Cendio, for more than 20 years.

The Swedish company Cendio develops ThinLinc. One of the key properties of ThinLinc, which makes it flexible, is that it shall be possible to integrate with any existing environment without modification, and any client device shall be able to access the server. Flexibility is a crucial feature for projects such as the one from Hagagymnasiet. Beyond that, the other fundamental properties are local experience, secure, reliable & robust, easy to administer & use, responsive support, and honest & clear information. Cendio aims, through ThinLinc, to "Provide the best Linux Remote Desktop Server." ThinLinc is available free of charge for up to 5 users and is available for download and test at www.cendio.com.
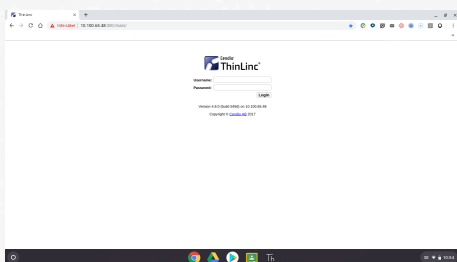


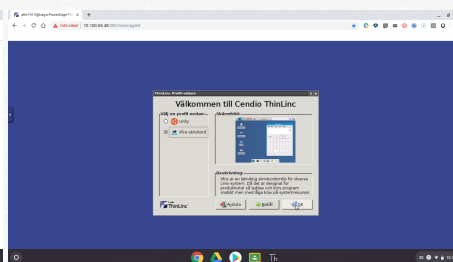Figure 1 - ThinLinc HTML5 Web Client Login Page (Running on Chrome OS/ Chrome)

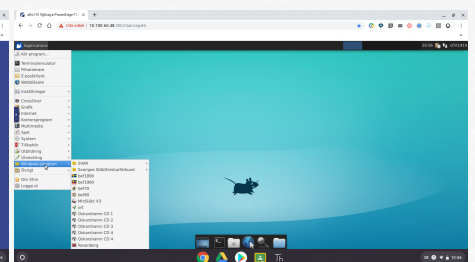Figure 2 - ThinLinc HTML5 Web Client Profile Chooser. XFCE and Unity desktops available.

Figure 3 - Windows applications available for access on the XFCE Desktop through Crossover.