



Whitepaper

IGEL Universal Desktop LX/OS lock down in 15 minutes or “Pimp my IGEL!-Part 2”

Version 1.00

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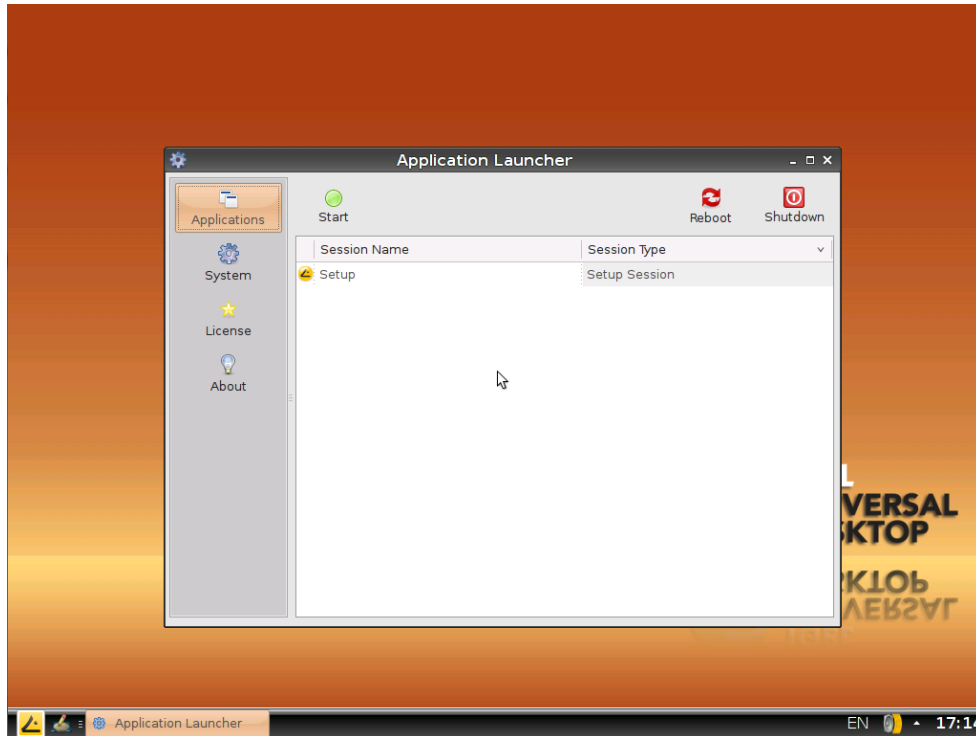
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Task

By default the IGEL Universal Desktop LX / OS Desktop is very open for Administrator and User access. In some scenarios it could be required to lock down the device for minimum user access and maximum security.

This Whitepaper will guide you to the most important settings and first configuration steps needs to be done to secure the device.



The screenshot above shows the regular IGEL Desktop, we will lock down everything here incl. USB device access, the configuration will be done thru the IGEL Universal Management Suite. No local Administration access will be allowed or is possible after the configuration. Important: Make sure to write down your set passwords!

Requirements

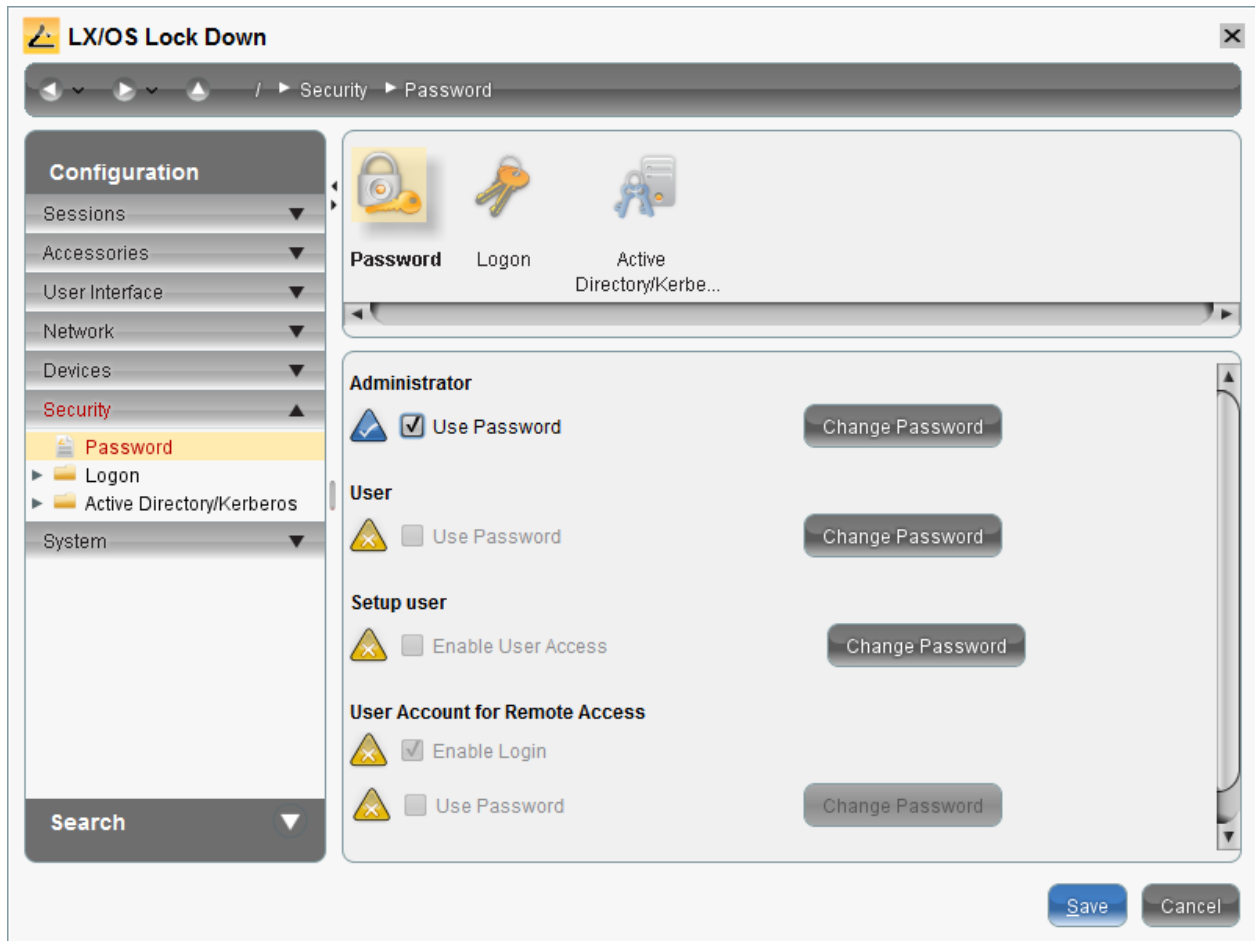
- A running IGEL Universal Management Suite environment (Version should be 4.01.x and higher)
- A IGEL Universal Desktop LX based Thin Client and/or a device running the IGEL Universal Desktop OS

Please Note

For this Whitepaper I've used the IGEL Universal Management Suite Version 4.03.200 and the IGEL Universal Desktop LX firmware Version 4.11.100.

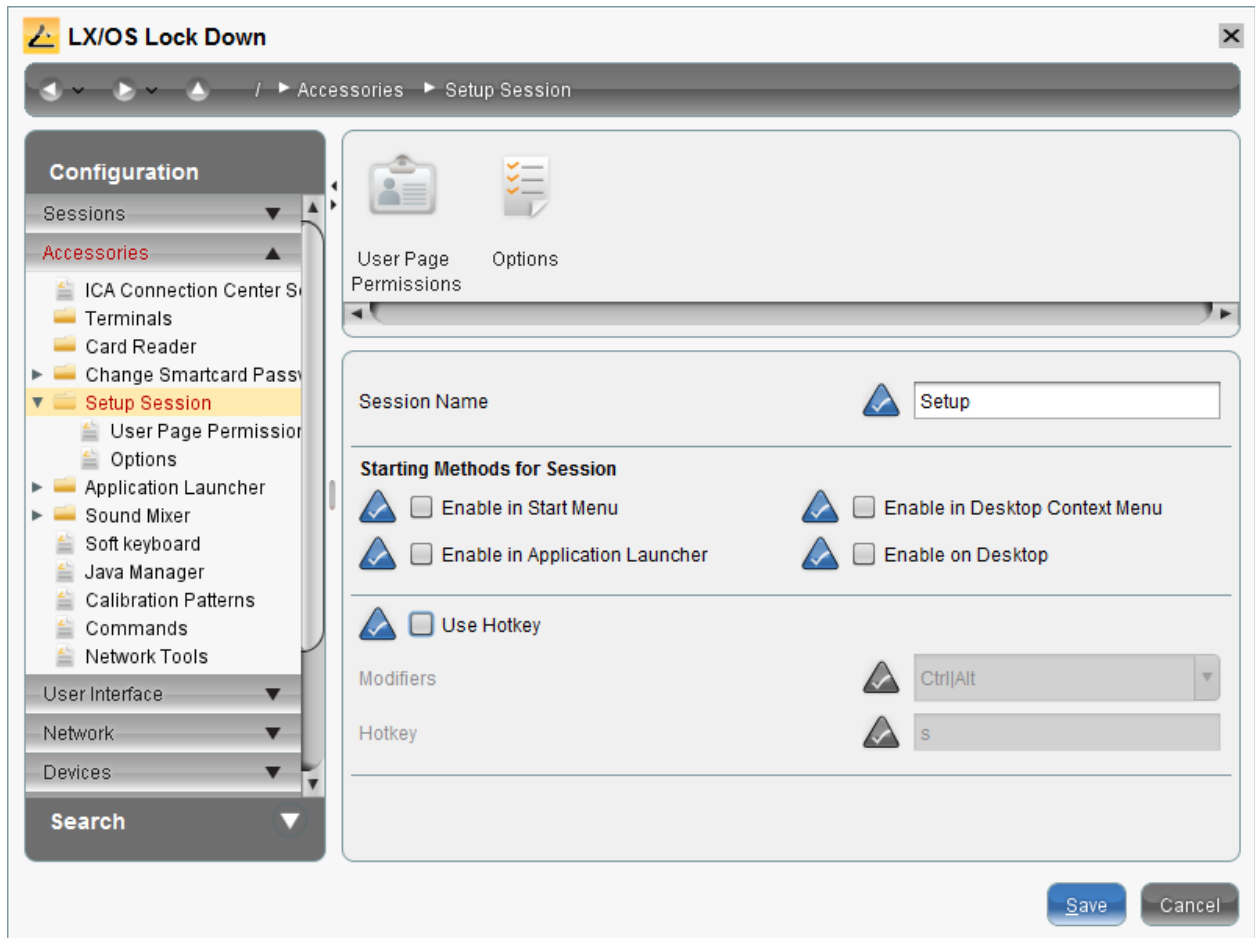
Minute 1

By default no Administrator Password is set, so this is the first important thing to do. Create a new Profile in the UMS and browse to Security->Password now enable the “Use Password” setting and click on Change Password to set the new Administrator Password.



Minute 2

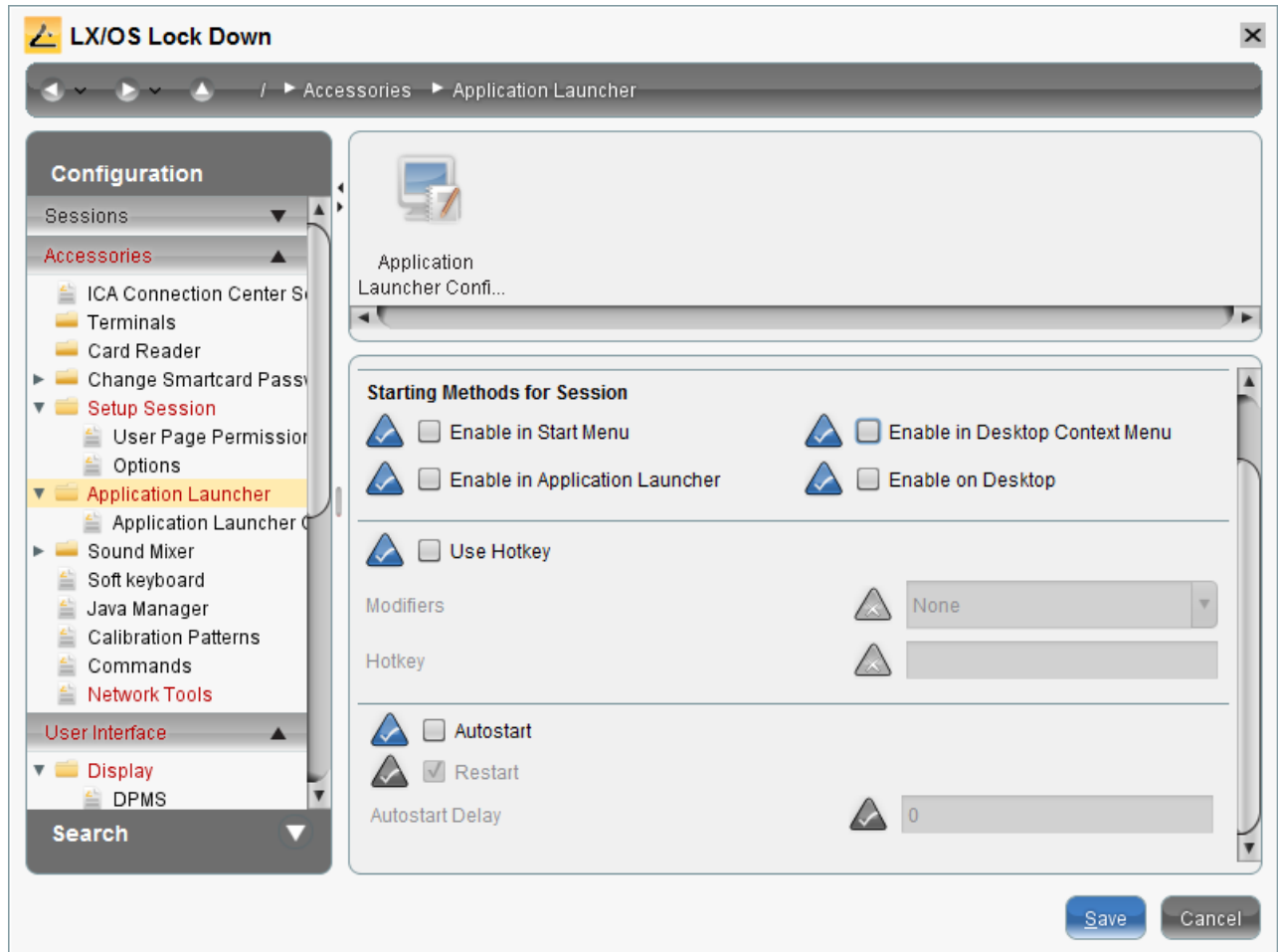
I want to disable the Access to the local Setup for anyone so browse to Accessories->Setup Session and configure the Setup session like shown in the screen below.



If you still want to provide access or only hide the Setup you can use the Hotkey of course, also you can configure a Setup User (see Screenshot Minute 1) and configure a Limited Access for this local User thru the "User Page Permission" configuration for the Setup Session.

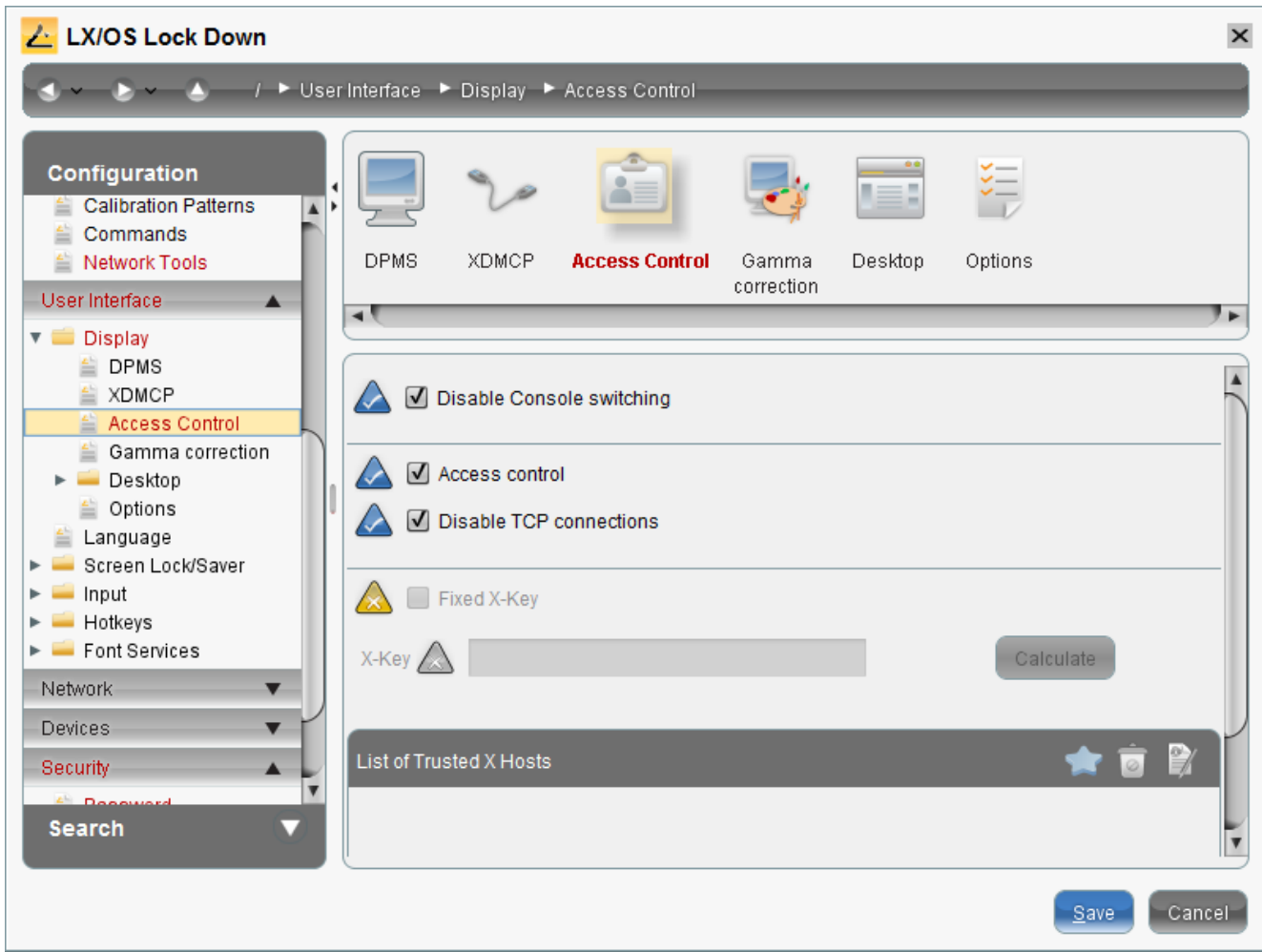
Minute 3

By default the Application Launcher will be launched after the IGEL System Boot and will grant access to some Tools, so I don't want to use the Application Launcher and will disable it. In the Profile browse to Accessories->Application Launcher, configure it like shown below and the Application Starter will not start anymore after a System Boot.



Minute 4

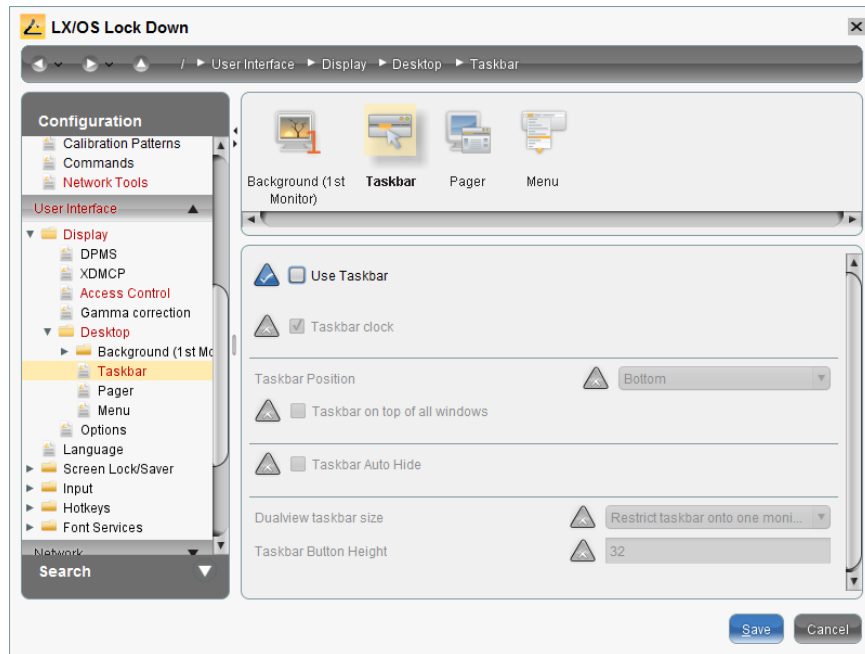
In the IGEL Linux you can switch between consoles by using ALT+CTRL+Fx, I don't want that user have access to a command line or any other Information provided by the Thin Client. So the task is to disable the console switching. In the profile browse to User Interface->Display->Access control and configure it like shown below.



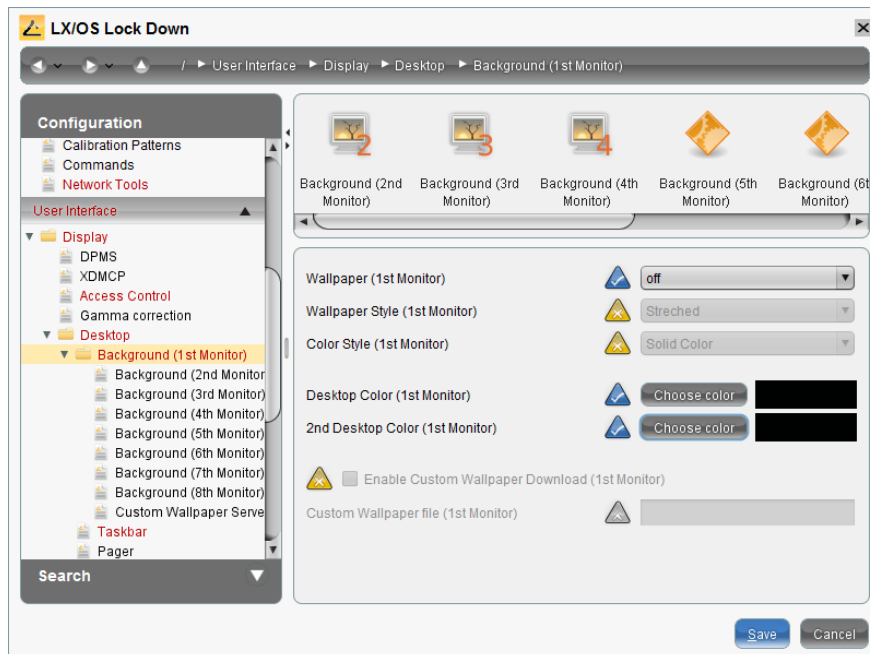
By default TCP connections to the Linux X Server are disabled, I also set this by keeping the default configuration to prevent any local configuration here in general. Configure a setting thru an UMS Profile by keeping the default setting will prevent the local configuration in general!

Minute 5

I also don't want a taskbar shown to the User, they should only get a black screen without any shown information. So as first step I will disable the Taskbar, browse to User Interface->Desktop->Taskbar and disable the taskbar like shown in the screenshot.

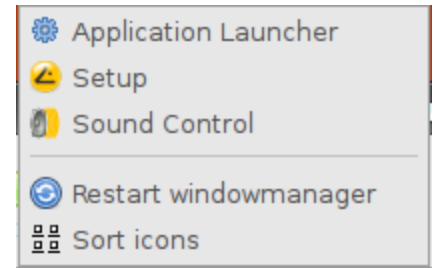


You can disable the Background now, browse in the Desktop configuration to Background (1st Monitor) and configure it like shown below. If you are using more than one Monitor repeat this step for the other displays, of course you can also configure an own background image or other colors.

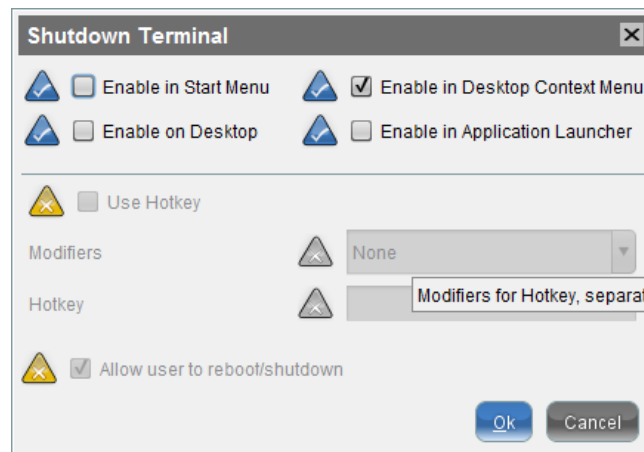
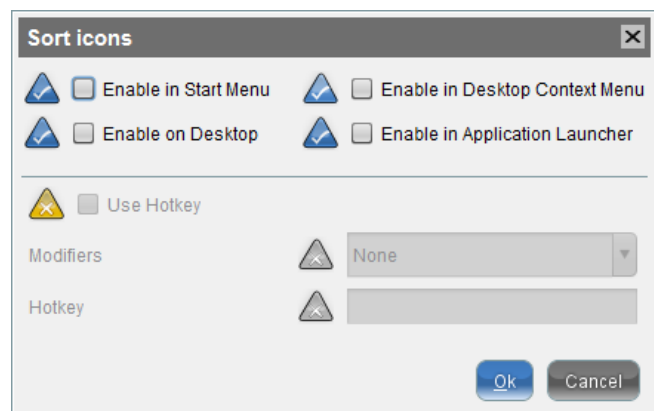
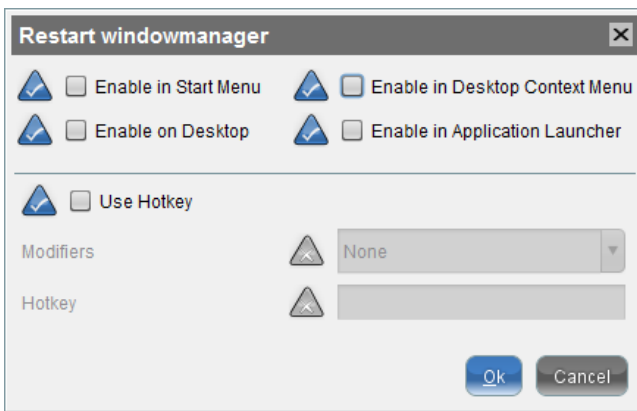


Minute 8

If the user clicks on the IGEL Desktop with the right mouse button he will get a context Menu (right Picture shows the IGEL default context Menu), I want that all Options are removed from this context Menu. We have already configured the Application Launcher and the IGEL setup but I want to remove also the Sound Control, the Restart windowmanager and the Sort Icons command. To allow the User the shutdown for the device I want to add this Option too.



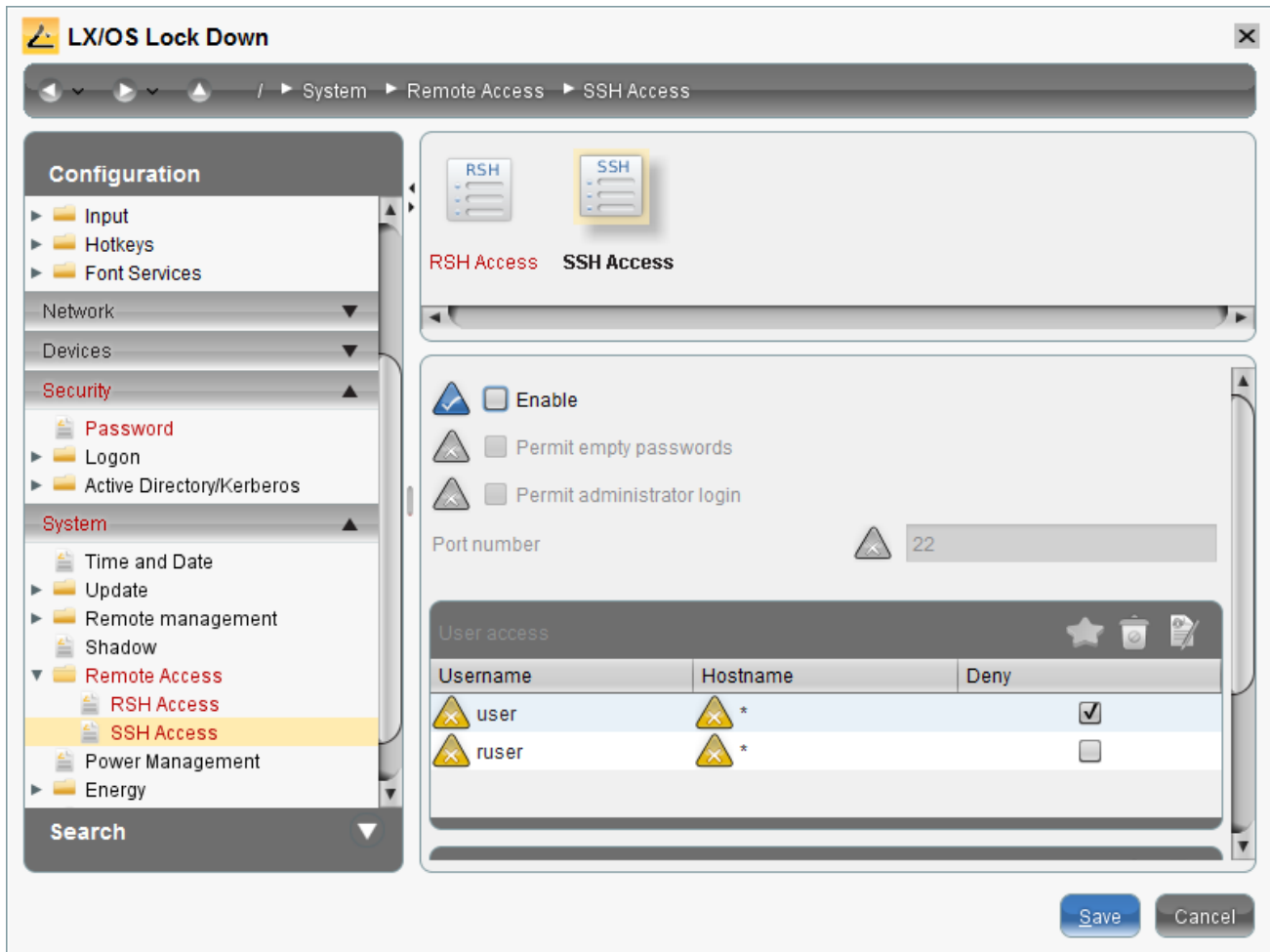
Some of these commands can be found in Accessories->Commands, so I will configure it like shown in the screenshots below. These are only samples and of course you can use other settings depending on your requirements.



The Sound Control configuration can't be found in the command tab, browse to Accessories->Sound Mixer to disable it in the context menu.

Minute 11

Now I want to disable the SSH Access and also to set the RSH remote access to disabled, to do this browse to System->Remote Access and configure RSH and SSH like shown in screenshot below.



Minute 12

My last configuration task is to limit the USB devices that can be used with the IGEL Universal Desktop LX/OS System. The general USB access configuration can be found in Devices->USB access control.

Please remember: You should enable Human Interface Devices (Mouse/Keyboard) in general! Of course you can also add the Keyboard and Mouse by adding device rules or other devices like an USB WiFi Stick. Be serious here! If you've done the configuration not thru the IGEL Universal Management Suite and you've configured it local thru the IGEL Setup-> Any wrong configuration here can stop your general access to the device and you need to reset ALL settings back to factory defaults!

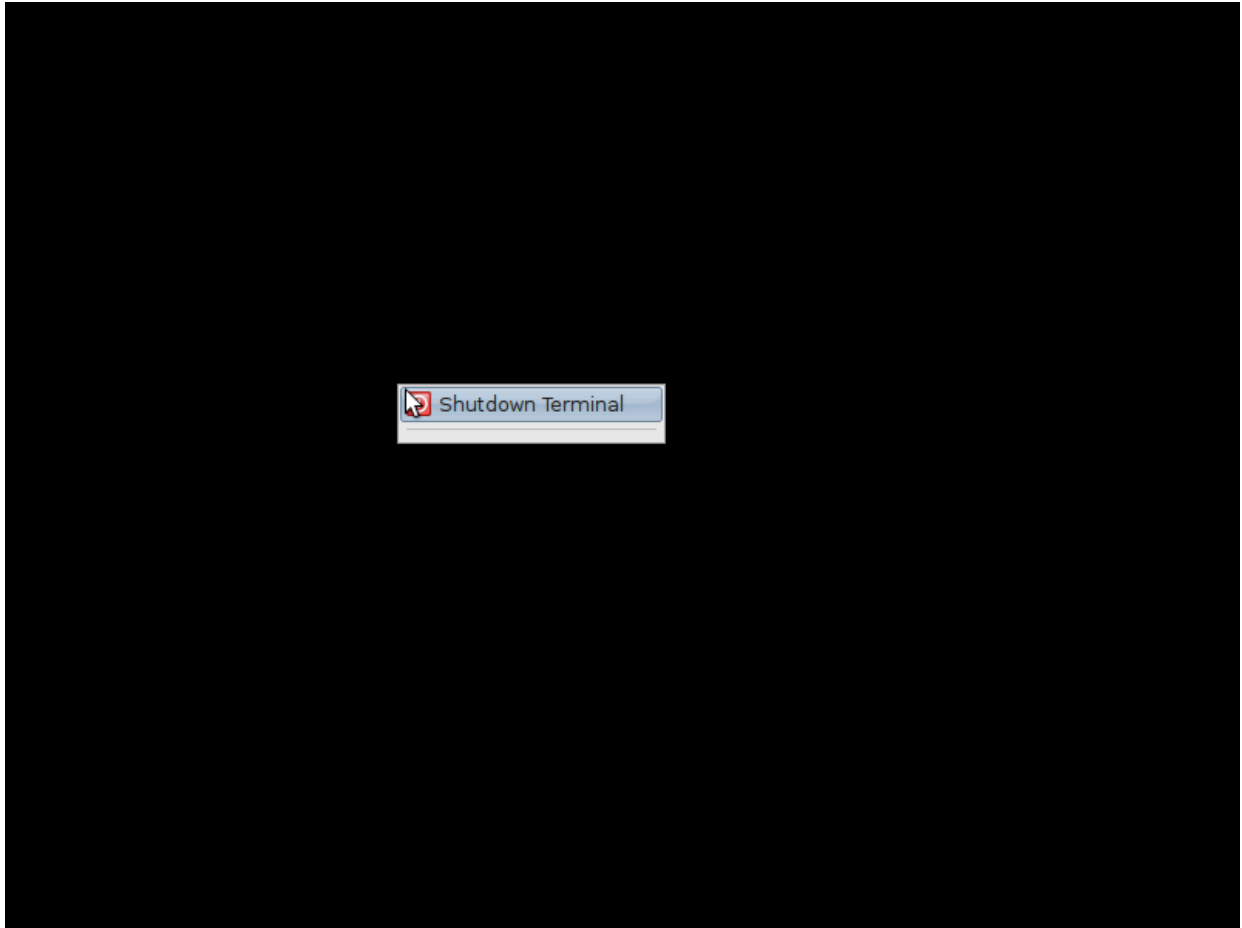
The screenshot shows the 'LX/OS Lock Down' configuration window, specifically the 'USB access control' section. The left sidebar contains a 'Configuration' menu with options like Sessions, Accessories, User Interface, Network, Devices, Security, and System. The 'Devices' section is expanded, showing Printer, Storage Devices, Smartcard, and USB access control (which is selected). The main area shows icons for Printer, Storage Devices, Smartcard, and USB access control. Below this, there is an 'Enable' checkbox (checked), a 'Default Rule' dropdown set to 'Deny', and two tables: 'Class Rules' and 'Device Rules'. The 'Class Rules' table has one row: 'Allow' with Class ID 'HID (Human Interfa...', Subclass ID 'All HID Devices', and Name 'Policy Rule'. The 'Device Rules' table is empty.

Rule	Class ID	Subclass ID	Name
Allow	HID (Human Interfa...	All HID Devices	Policy Rule

Rule	Vendor ID	Product ID	Name	Device uuid
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Minute 15

We're done, the result looks like shown below. Now you can add an autostart Session like Citrix, Microsoft or whatever to the device.



I've clicked with the right mouse button so you will see the normally not shown context menu.