EdgeConnect Kiosk Setup (Working Configuration)

This document describes the **validated, working steps** to configure the Linux HDMI mini PC (Azulle Access ARM / LubanCat-based Ubuntu) to boot directly into the EdgeConnect UI in Chromium kiosk mode.

The approach avoids GNOME/GDM and uses:

- tty1 auto-login
- Xorg started via `xinit`
- Openbox window manager
- Chromium in kiosk mode

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1. EdgeConnect Publish Location

Copy the published Linux ARM64 build to:

`/opt/edgeconnect`

Ensure the service is configured and running:

```
sudo systemctl enable edgeconnect
sudo systemctl start edgeconnect
```

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2. Install Required Packages

```
sudo apt update
sudo apt install --no-install-recommends \
  xserver-xorg \
  xinit \
  openbox \
  unclutter \
  chromium-browser
```

---

3. Configure tty1 Auto-Login

Create override:

```
sudo mkdir -p /etc/systemd/system/getty@tty1.service.d
sudo tee /etc/systemd/system/getty@tty1.service.d/autologin.conf > /dev/null <<'EOF'
[Service]
ExecStart=
ExecStart=-/sbin/agetty --autologin cat --noclear %I $TERM
```

```
Type=simple
EOF

sudo systemctl daemon-reload
```

---

4. Use Real Xorg Binary

Create `/home/cat/.xserverrc`:

```
#!/bin/sh
exec /usr/lib/xorg/Xorg :0 vt1 -keeptty -nolisten tcp
```

```
chmod +x /home/cat/.xserverrc
chown cat:cat /home/cat/.xserverrc
```

---

5. Create X Session Startup

Create `/home/cat/.xinitrc`:

```
#!/bin/sh

export DISPLAY=:0

xset s off
xset -dpms
xset s noblank

unclutter -idle 0 &

openbox-session &

sleep 2

exec /usr/bin/chromium-browser \
  --kiosk \
  --start-fullscreen \
  --incognito \
  --noerrdialogs \
  --disable-infobars \
  --disable-session-crashed-bubble \
  http://localhost:5000
```

```
chmod +x /home/cat/.xinitrc
chown cat:cat /home/cat/.xinitrc
```

---

6. Auto-Start X on Login

Create `/home/cat/.profile`:

```
if [ "$(tty)" = "/dev/tty1" ] && ! pgrep -x Xorg >/dev/null; then
    exec xinit /home/cat/.xinitrc -- /usr/lib/xorg/Xorg :0 vt1 -keeptty -nolisten tcp
fi
```

Ensure Bash loads `.profile` by updating `/home/cat/.bash_profile`:

```
if [ -f ~/.profile ]; then
    . ~/.profile
fi
```

```
chown cat:cat /home/cat/.profile /home/cat/.bash_profile
chmod 644 /home/cat/.profile /home/cat/.bash_profile
```

---

7. Disable GNOME / GDM

```
sudo systemctl disable gdm3
sudo systemctl set-default multi-user.target
```

---

8. Clean X Authentication Files

```
rm -f /home/cat/.Xauthority
rm -f /home/cat/.serverauth.*
```

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9. Reboot and Verify

```
sudo reboot
```

Expected behavior:

```
Boot
? tty1 auto-login (cat)
? .profile runs xinit
? Xorg starts on vt1
? openbox starts
? Chromium launches fullscreen
? EdgeConnect UI loads
```

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10. Maintenance Tips

Switch to terminal (while kiosk is running)

`Ctrl + Alt + F2`

Return to kiosk:

`Ctrl + Alt + F1`

Check IP address

`ip a`

SSH from laptop

`ssh cat@<device-ip>`

Updating EdgeConnect Software

To update the EdgeConnect application on the device, follow these steps.

1. Prepare the New Publish

On your development machine, publish a new Linux ARM64 build of EdgeConnect.

Example:

```
dotnet publish -c Release -r linux-arm64 --self-contained true
```

Locate the publish output folder.

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2. Transfer Files to the Device

Use **MobaXTerm (SFTP panel)** or another file transfer method to copy the new publish contents to the device.

Target directory:

`/opt/edgeconnect`

You can either:

- overwrite the existing files, or
- copy to a temporary folder and replace them

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3. Stop the EdgeConnect Service

```
sudo systemctl stop edgeconnect
```

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4. Replace the Application Files

If copying from a temporary location:

```
sudo rm -rf /opt/edgeconnect/*
sudo cp -r <new-publish-folder>/* /opt/edgeconnect/
```

Ensure correct permissions:

```
sudo chown -R cat:cat /opt/edgeconnect
```

---

5. Start the Service

```
sudo systemctl start edgeconnect
```

Verify status:

```
systemctl status edgeconnect
```

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6. Verify in Browser

The kiosk browser should automatically reload or can be refreshed to confirm the new version is running.

Notes

- This configuration avoids GNOME entirely for stability and faster boot.
- Uses the real Xorg binary (`/usr/lib/xorg/Xorg`) which is required on this hardware.
- Designed for kiosk/demo environments (tradeshows, customer demos).