Cloud-Init Fix - FINAL SOLUTION

Why Previous Fixes Failed

1. **Service-based approach**: Services run too late - cloud-init.target can start before our service
2. **Trying to "unblock"**: Doesn't prevent cloud-init from running, just forces completion
3. **Dependencies**: Systemd might start cloud-init.target before our service runs

The REAL Solution: Systemd Override

Systemd reads override files **BEFORE** starting services. This is the proper way to disable targets.

Method 1: Systemd Override File

Location: `/etc/systemd/system/cloud-init.target.d/override.conf`

```
[Unit]
# Override cloud-init.target to make it a no-op
# This prevents cloud-init from blocking boot
After=
Wants=
Requires=
```

This removes all dependencies from cloud-init.target, making it a no-op.

Method 2: Direct Masking

Location: `/etc/systemd/system/cloud-init.target` → symlink to `/dev/null`

This prevents systemd from even trying to start cloud-init.target.

Method 3: Mask All Services

Mask all cloud-init services:
• `cloud-init.service` → `/dev/null`
• `cloud-init-local.service` → `/dev/null`
• `cloud-config.service` → `/dev/null`
• `cloud-final.service` → `/dev/null`

Method 4: Systemctl Disable (Backup)

Also disable via systemctl as backup.

Why This Works

1. **Override files are read at boot** - Before any services start
2. **Symlinks to /dev/null** - Systemd can't start masked services/targets
3. **Multiple layers** - If one method fails, others catch it
4. **Applied during build** - Permanent, not runtime

Implementation

On SD Card (Runtime Fix)

```
# Create override directory
mkdir -p /etc/systemd/system/cloud-init.target.d

# Create override file
cat > /etc/systemd/system/cloud-init.target.d/override.conf << 'EOF'
[Unit]
After=
Wants=
Requires=
EOF

# Mask cloud-init.target
rm -f /etc/systemd/system/cloud-init.target
ln -sf /dev/null /etc/systemd/system/cloud-init.target

# Mask all cloud-init services
for svc in cloud-init cloud-init-local cloud-config cloud-final; do
    rm -f /etc/systemd/system/$svc.service
    ln -sf /dev/null /etc/systemd/system/$svc.service
done
```

In Build Script (Permanent Fix)

Added to `imgbuild/moode-cfg/stage3`*03-ghettoblaster-custom*`00-run-chroot.sh`

Files Modified

1. `imgbuild/moode-cfg/stage3_03-ghettoblaster-custom_00-run-chroot.sh` - Build script
2. SD card: `/etc/systemd/system/cloud-init.target.d/override.conf` - Override file
3. SD card: `/etc/systemd/system/cloud-init.target` - Masked target
4. SD card: `/etc/systemd/system/cloud-init*.service` - Masked services

Status

■ Override file created on SD card
■ cloud-init.target masked on SD card
■ All cloud-init services masked on SD card
■ Build script updated for permanent fix

This is the proper systemd way to disable targets. It should work.