

# 6-DRC INSIGHT - COS

## Troubleshooting

**Purpose:** Resolve the most common Linux COS installation, service, and Chromebook issues.

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### Issue 1 - Installer Fails or Stops Early

**Symptoms:**

- No usable COS services
- Installer exits quickly
- Lock file or temp errors

**Fix:**

```
sudo chmod 1777 /tmp
sudo rm -rf /opt/CentralOffice
sudo rm -f /tmp/coinstaller*.lock
sudo ./silent-linux.sh
```

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### Issue 2 - Only Proxy Runs

**Symptoms:**

- `forever list` shows only proxy
- relay and contenthosting do not stay running

#### Likely Cause:

- Registration not completed
- Configuration not generated correctly

#### Fix:

- Complete the setup URL from installation
  - Restart COS services
- 

## Issue 3 - Relay Heartbeat Error

#### Error:

```
CO API - Heartbeat returned undefined
```

#### Likely Cause:

- Registration incomplete
- DRC API not reachable
- Upstream filtering or SSL inspection interfering

#### Fix:

- Complete registration
  - Verify internet connectivity
  - Allow required DRC URLs and ports
- 

## Issue 4 - Services Show "active (exited)"

This can be normal. COS uses `forever` to launch Node services in the background, so the systemd wrapper may show as exited while the Node processes continue running.

#### Use this command as the truth source:

```
sudo /opt/CentralOffice/node \  
/opt/CentralOffice/setup/node_modules/forever/bin/forever -p /opt/CentralOffice list
```

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# Issue 5 - Chromebooks Cannot Connect

## Check:

- ORG Unit ID entered correctly
  - Chromebook can reach COS network path
  - Display size is 100%
  - Keyboard is US English
  - Portal configuration is green
- 

# Issue 6 - Content Does Not Download

## Check:

- Content Management enabled
  - Content Hosting enabled
  - Shared Content OFF for single server
  - Correct test programs selected
- 

# Useful Commands

```
# Check runtime services  
sudo /opt/CentralOffice/node \  
/opt/CentralOffice/setup/node_modules/forever/bin/forever -p /opt/CentralOffice list  
  
# Check ports
```

```
sudo ss -tulnp | grep node
```

```
# Check content directory
```

```
ls -lah /opt/CentralOffice/content_fs
```

```
# Follow content hosting logs
```

```
sudo journalctl -u centralofficecontenthosting -f
```

```
# Follow relay logs
```

```
sudo journalctl -u centralofficerelay -f
```

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# Support Contacts

- DRC PA Customer Service: (800) 451-7849
- DRC Status Page: <https://status.drccdirect.com/PA>

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## End of Troubleshooting SOP

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