Disk Space Issues & Too Many Files

When the EPIC system experiences issues like slowdowns or fails to operate correctly, a common culprit is a lack of available disk space. This guide will walk you through checking disk usage, identifying large files, and understanding where to find and manage excessive data in key directories.

1. Checking Disk Space

To start troubleshooting disk space issues, check the available disk space on your system:

1. **Check Disk Usage on All Mount Points**:
   - Use the following command to get an overview of disk space usage on each mount point:

     ```
     df -h
     ```

   - **Explanation**:
     - `df -h` shows disk usage in a human-readable format, displaying each mount point's usage as a percentage.
     - Focus on the `/` mount point (root of the filesystem). If the usage is close to or at `100%`, this is a strong indicator of disk space issues.
2. **Identify Large Files and Directories**:
   - To find the largest files and directories consuming space, run:

```
du -aBG / | sort -nr | head -n 25
```

- **Explanation of Each Part**:
  - `du -aBG /`: Checks disk usage across the entire filesystem (`/`), displaying sizes in gigabytes.
  - `sort -nr`: Sorts the output numerically in reverse order (largest to smallest).
  - `head -n 25`: Limits the output to the top 25 entries for easier review.
- **Interpreting the Output**:This indicates recordings stored in the `view-path` directory are consuming significant disk space.
  - Example output might include:

```
98GB /home/epicsystem/addons/view-path/public/recordings
```

3. **Investigating Backup File Locations**:
   - When backups fail to reach their scheduled filepath, they are stored on the server itself, often causing unexpected disk usage. To check for such backups, navigate to:

```
cd /home/epicsystem/public/exportTemp
```

   - **What to Look For**:
     - A large number of backup files in this directory is a strong indicator that the backup path isn't functioning properly. Verify the intended backup destination folder and ensure it is accessible.

2. Key Paths for Troubleshooting Disk Space Issues

Here are common directories to check for excessive data:

1. **View-Path Recordings**:
    - **Location**: `/home/epicsystem/addons/view-path/public/recordings`
    - **Purpose**: Stores audio/video recordings for view-path functionality.
    - **Common Issue**: Accumulated recordings can quickly fill up disk space.
    - **Solution**: Review and delete unnecessary or old files.
2. **Export Temp Directory**:
    - **Location**: `/home/epicsystem/public/exportTemp`
    - **Purpose**: Temporary storage for backup files that couldn't reach their intended destination.
    - **Common Issue**: A high number of backup files here indicates an issue with the backup path.
    - **Solution**: Verify the backup configuration and destination. Remove old or unnecessary backups to free space.
3. **Log Files**:
    - **Location**: `/home/epicsystem/logs`
    - **Purpose**: Stores system and application logs.
    - **Common Issue**: Logs can grow unchecked if not rotated or archived, consuming significant space.
    - **Solution**: Delete outdated log files as needed.

3. Deleting Excess Files

Once large files or directories are identified, you may need to delete some to free up space:

1. **Find Old Files**:
    - To locate files older than 30 days:

```
find /home/epicsystem/addons/view-path/public/recordings -type f -mtime +30
```

2. **Delete Old Files**:
   - To delete files older than 30 days:

```
find /home/epicsystem/addons/view-path/public/recordings -type f -mtime +30 -delete
```

   - **Caution**: Double-check the files targeted for deletion to avoid removing critical data.

4. Additional Commands for System Health Checks

Here are other useful commands to ensure the system is running smoothly:

- **Check PM2 Status**:

```
pm2 status
```

  - Provides an overview of Node.js processes managed by PM2, including any failures.

- **Check Network Status**:

```
networkctl
```

  - Confirms network connectivity and configurations.

- **Verify Disk Space Regularly**:
  - Use `df -h` to routinely monitor disk usage. If certain directories are frequently filled, consider implementing automated cleanup scripts or adjusting storage configurations.

By following these steps and regularly monitoring key directories, you can proactively address disk space issues and maintain the EPIC system's performance.