Selective Sync Feature

Overview

The Selective Sync feature allows you to choose which folders from your ProtonDrive to synchronize locally. This is useful when:
- You have limited local storage space
- You only need access to specific folders
- You want to optimize bandwidth usage
- You need different sync configurations for different devices

Sync Modes

1. Full Sync

Synchronizes all folders from your ProtonDrive to your local directory.

Use case: When you want a complete local copy of your ProtonDrive.

2. Selective Include

Only synchronizes the folders you explicitly select.

Use case: When you want to sync only a few specific folders (e.g., "Work Documents" and "Photos").

How it works:
- Start with no folders selected
- Add folders you want to sync
- Only selected folders will be synchronized

3. Selective Exclude

Synchronizes all folders except the ones you explicitly exclude.

Use case: When you want most of your ProtonDrive but need to skip a few large or unnecessary folders.

How it works:
- Start with all folders selected
- Remove folders you don't want to sync
- All folders except excluded ones will be synchronized

Using Selective Sync

Initial Setup

1. **Launch the Application:**
   ```bash
   ./run.sh
   ```

2. **Navigate to Sync Settings:**
   - Go to the "Selective Sync" tab in the main window
   - Or use the setup wizard on first run

3. **Choose Your Sync Mode:**
   - Click on the radio button for your preferred mode
   - The folder tree will update to reflect your choice

4. **Select Folders:**
   - **For Include Mode:** Check the folders you want to sync
   - **For Exclude Mode:** Uncheck the folders you don't want to sync
   - The tree shows your ProtonDrive folder structure

5. **View Estimated Size:**
   - Click "Estimate Size" to see how much data will be synced
   - Useful for planning storage requirements

6. **Apply Changes:**
   - Click "Apply Sync Filters"
   - Your selections will be saved to the configuration

Modifying Your Selection

You can change your folder selection at any time:

1. Open the application
2. Go to "Selective Sync" tab
3. Modify your selections
4. Click "Apply Sync Filters"
5. The next sync will respect your new configuration

Safety Features

Dry Run

Before performing a large sync, the application can:
- Show what would be transferred
- Display the estimated data size
- Ask for confirmation before proceeding

Enable in Settings:

```
☑ Perform dry run before first sync
```

Large Sync Warning

If your sync would transfer more than the configured threshold (default: 1GB):
- You'll receive a warning prompt
- You can review the estimated size
- You can choose to proceed or cancel

Configure in config.json:

```
{
  "large_sync_threshold_mb": 1024
}
```

Bandwidth Limiting

Limit the bandwidth used during sync to avoid network congestion:

Set in Settings:

```
Bandwidth Limit: [500] KB/s
```

Or in config.json:

```
{
  "bandwidth_limit_kbps": 500
}
```

Configuration File

Selective sync settings are stored in `~/.config/protondrive-sync/config.json`:

```
{
  "sync_mode": "selective_include",
  "included_folders": [
    "Work Documents",
    "Photos/2024"
  ],
  "excluded_folders": [],
  "dry_run_first_sync": true,
  "large_sync_threshold_mb": 1024,
  "bandwidth_limit_kbps": 0
}
```

Configuration Options

Option	Values	Description
`sync_mode`	`full`, `selective_include`, `selective_exclude`	Determines which folders to sync
`included_folders`	List of folder paths	Folders to include (for include mode)
`excluded_folders`	List of folder paths	Folders to exclude (for exclude mode)
`dry_run_first_sync`	`true`, `false`	Perform dry run before first sync
`large_sync_threshold_mb`	Number (MB)	Size threshold for warning prompt
`bandwidth_limit_kbps`	Number (KB/s)	Bandwidth limit (0 = unlimited)

Technical Details

Rclone Integration

The selective sync feature uses rclone's filter system:

Include Mode:

```
rclone sync protondrive: /local/path \
  --include "Work Documents/**" \
  --include "Photos/2024/**" \
  --exclude "*"
```

Exclude Mode:

```
rclone sync protondrive: /local/path \
  --exclude "Large Videos/**" \
  --exclude "Archive/**"
```

Folder Listing

The application uses `rclone lsf` to retrieve the folder structure:

```
rclone lsf protondrive: --dirs-only --recursive --max-depth 5
```

Size Estimation

Size calculation uses `rclone size` with filters:

```
rclone size protondrive: --include "Selected/**" --json
```

Troubleshooting

Problem: Folders not appearing in tree

Solution:

1. Verify ProtonDrive is configured:

`bash`

```
rclone listremotes
```

2. Check ProtonDrive connection:

`bash`

```
rclone lsd protondrive:
```

3. Review application logs for errors

Problem: Sync includes/excludes wrong folders

Solution:

1. Check `config.json` for correct folder paths
2. Verify folder names match exactly (case-sensitive)
3. Use folder browser in application to ensure correct selection
4. Test with dry run to preview changes

Problem: Size estimation takes too long

Solution:

- Large ProtonDrive accounts may take time to scan
- Cancel and proceed if you don't need exact size
- Size estimation is optional

Problem: First sync is very slow

Solution:

1. Check your bandwidth limit setting
2. Verify internet connection speed
3. ProtonDrive API may have rate limits
4. Consider syncing smaller folder sets first

Best Practices

1. **Start Small:** Begin with a few important folders
2. **Test First:** Use dry run to preview large syncs
3. **Monitor Usage:** Check disk space before major syncs
4. **Regular Review:** Periodically review your folder selection
5. **Bandwidth Control:** Set limits during business hours
6. **Nested Folders:** When including a parent folder, all subfolders are included

Examples

Example 1: Sync only work files

```
Mode: Selective Include
Selected:
  ✓ Work Documents
  ✓ Projects/Current
```

Example 2: Sync everything except large media

```
Mode: Selective Exclude
Excluded:
  ✗ Videos
  ✗ Raw Photos
  ✗ Backup Archives
```

Example 3: Sync with bandwidth limit

```
Mode: Full
Bandwidth Limit: 500 KB/s
Dry Run: Enabled
```

See Also

- [ProtonDrive Setup Guide](../setup/PROTONDRIVE_SETUP.md) (../setup/PROTONDRIVE_SETUP.md)
- [Authentication Documentation](authentication.md) (authentication.md)
- [Installation Guide](../setup/INSTALLATION_GUIDE.md) (../setup/INSTALLATION_GUIDE.md)